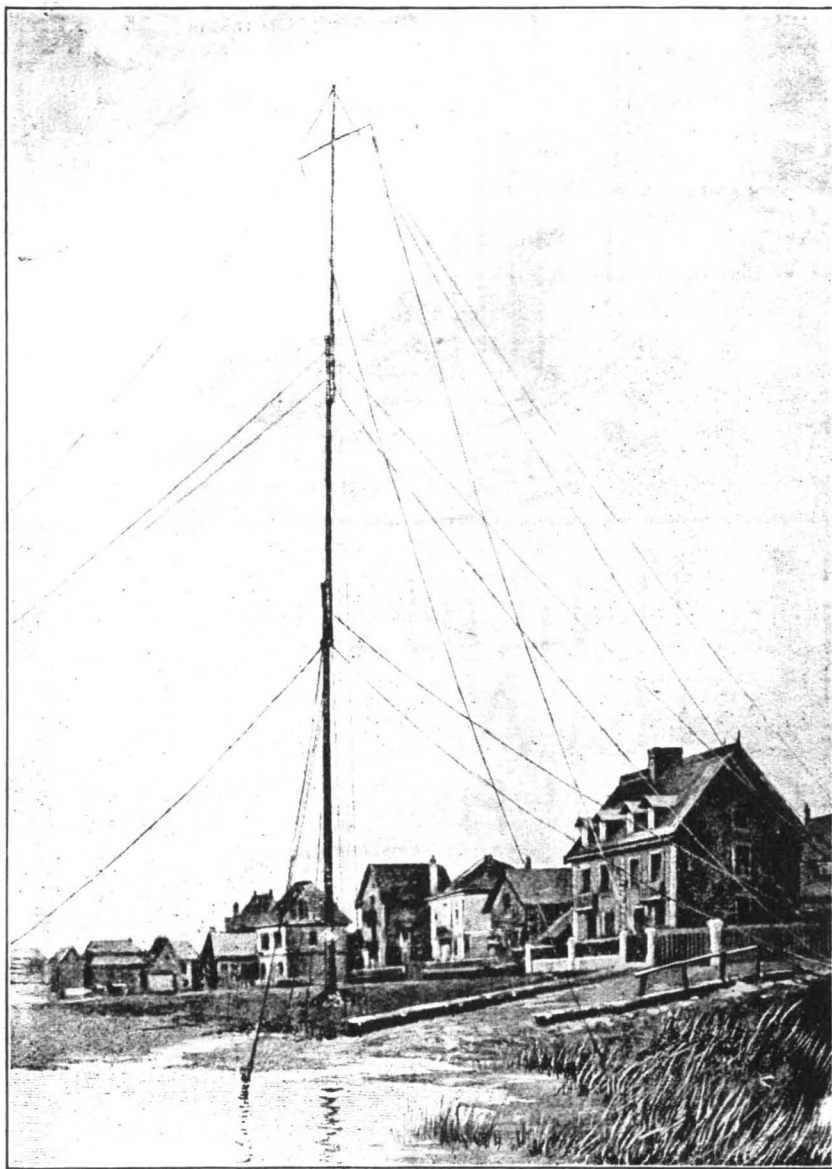


AUGUST, 1904

THE
ELECTRICAL WORKER
OFFICIAL JOURNAL
INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS.



A GOVERNMENT WIRELESS TELEGRAPH STATION

..Three Famous Brands of Rubber Boots..

Many a lineman owes his life to his rubber boots. With other people rubber boots keep out the wet; with linemen they keep out the wet **and the electricity**. But a cracked rubber boot is a dangerous thing for a lineman to wear. His rubber boots should be the best. Here are three famous brands of rubber boots:

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The first are made by the Boston Rubber Shoe Co., Boston; the second by L. Candee & Co., New Haven, Conn.; the third by the Woonsocket Rubber Co., Woonsocket, R. I., all old reliable companies, whose goods have been a standard for 50 years. Look on the bottom of your boots. If one of these three names are there, you've got good boots.

Keeping Up with the Times

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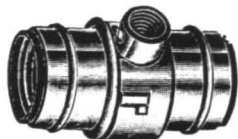
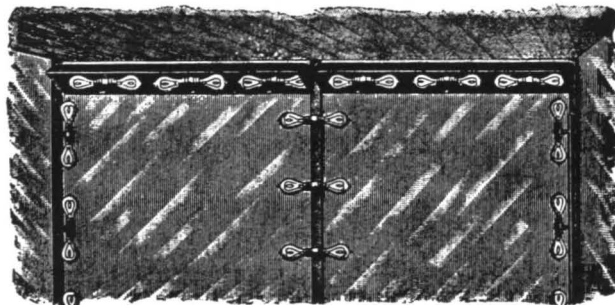
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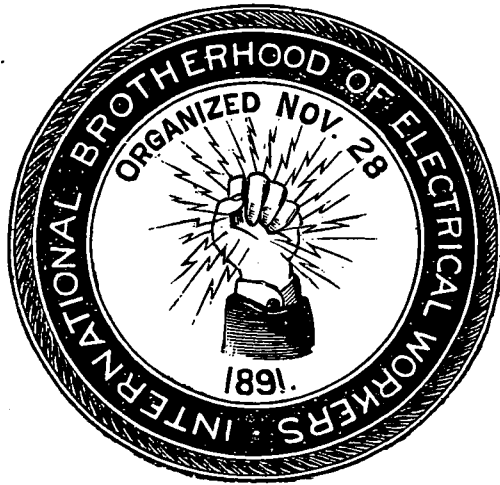


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THE ELECTRICAL



WORKER

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BROTHERHOOD OF ELECTRICAL WORKERS

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LARGEST AND SMALLEST THINGS ELECTRIC AND MAGNETIC

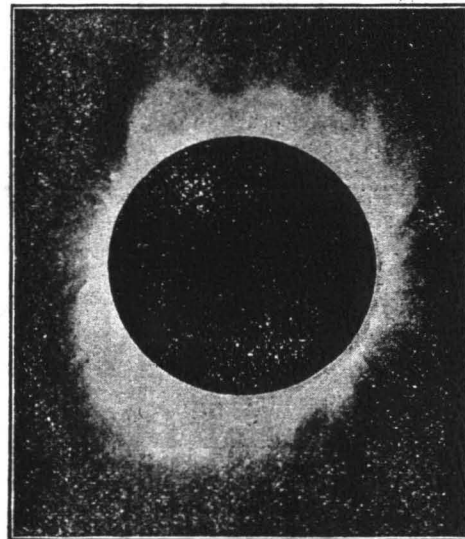
THERE was once made a huge magnet, composed of two cannon wound with copper wire, which could easily hold, attached by magnetic attraction, large cannon balls. There is at Niagara Falls a huge electric plant that transmits its gathered current many miles. And there are other electric plants (notably in New York City, for the elevated railway service), which give us ideas in hugeness in electrical operations. But there is one "plant," electric and magnetic (there is a difference in these two forces) which far transcends in size and power all others combined.

This "plant" is situated in "outer space" many millions of miles from our planet, and is called the sun. This is the life-giver to the earth and all thereon. It is a plant that furnishes light, heat, and power. Electrical energy comes from it, and is stored up in the earth; also being retained in the earth's atmospheric envelope; and our planetary magnet receives from the sun magnetic force, whirling through space at the rate of over one thousand miles an hour, but being held steadily and true in diurnal and annual motions by the more powerful magnet (the sun), which it obeys.

The sun presents to us a never failing source of speculation; and to those who seek to solve its mysteries it becomes a fascinating study. Let us consider the size of this "electric-magnetic plant," and some of its other features. As an illustration, suppose the sun were hollowed out and the earth set within it; the inner space of the sphere would be so extensive that the moon

also could be put therein and go on revolving about the earth as it now does, and at the same distance away. And still there would be immense room to spare in the hollowed globe.

In the matter of heat the figures in this connection are stupendous. It has been



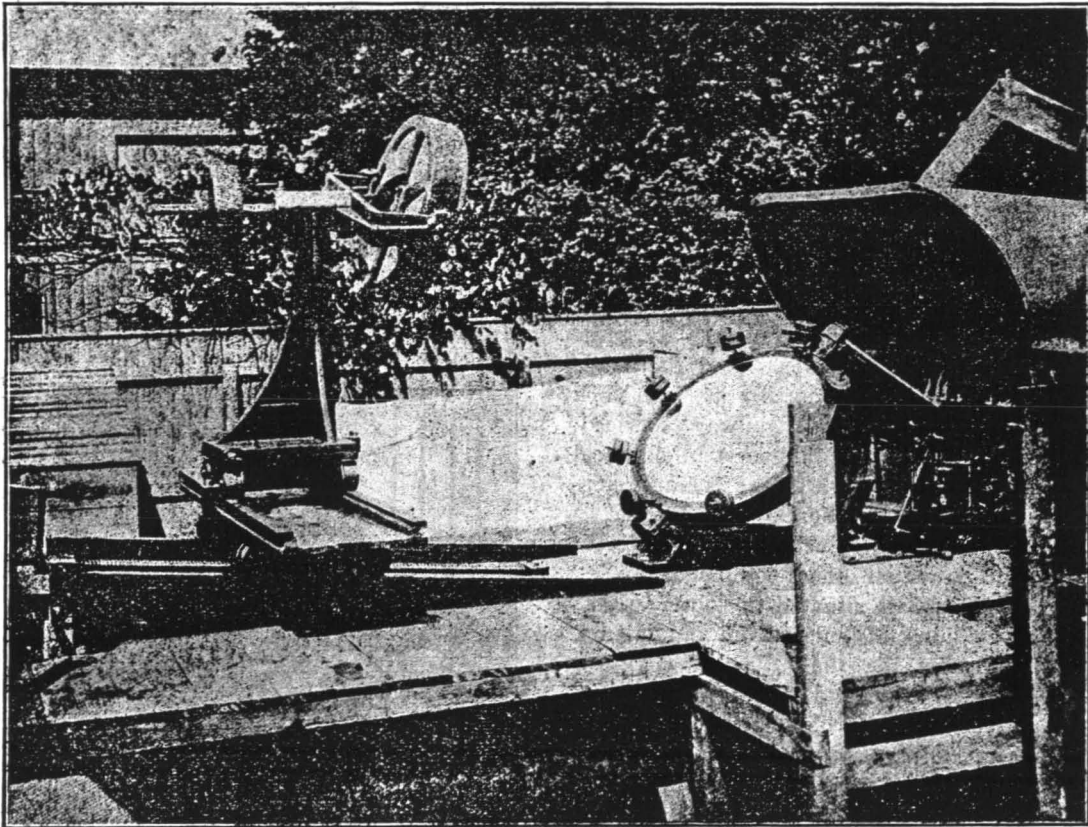
SOLAR CORONA

said that if the whole annual orbit were set close with globes like ours and "strung with worlds like beads upon a string," each would receive the enormous amount of sun heat the earth does now. And if 2,000,000,000 worlds like ours were arranged around the sun in all directions, each would be warmed by Old Sol, as we are warmed.

The light and heat producer of the sun is not in the solar globe proper, but belongs

to the photosphere, the luminous inner envelope, said to be about 2,000 miles thick. This, also, may be the solar electric, or electro-magnetic, "storage plant," with the inner "core" of the globe for a generator. That forceful influence does come from this source is a fact pretty well established. It once was demonstrated during the occurrence of sun spots, when a great light shot from the sun (presumably an electric dis-

Above the sun's photosphere surface there is a thin stratum containing a number of elements, and because of its effect upon the spectrum is called the "reversing layer." Then comes a reddish gas, principally hydrogen, from which extend great clouds or elevations, and then the corona composed of gas and dust, the most extensive of all the sun's surroundings. This is more than a million miles deep.



THE COELOSTAT-REFLECTING MIRRORS

charge) and electric and magnetic instruments on earth were violently disturbed.

Speaking of sun spots it may be said here, that upon the last "breaking out of spots" on the solar orb, it was said by some scientists that a period of warm weather would be a part of the result. The writer of this argued, in an article on the subject, that cold would follow. Well, the cold followed, and followed severely, and cold and cool weather has kept on through spring and summer, up to the present time—August.

Another manifestation of sun phenomena are spots brighter than the rest of the orb. These are thought to be clouds of calcium and other glowing material, which at times are ejected from the sun's interior. And what is the interior of the sun composed of? Astronomers say it is a gaseous substance compressed to a density heavier than water. The spectroscope gives an idea of the composition of the sun's coverings, and from the latter only can we draw conclusions about the inner part.

How do we find out the constituents of

the sun? If one goes to the St. Louis Exposition a visit to a Government exhibit, the Astrophysical Observatory, will demonstrate this. And there the minutest of electrical and magnetic instruments can be seen. These are used in connection with the spectroscope and sun heat measurement, and consist principally of a bolometer, galvanometer, and magnets.

Of course, the composition of the solar orb is found by aid of the spectroscope and colors. The foundations of spectroscopy was in the discovery that the visible spectrum of the sun and stars was everywhere crossed by black lines, and this phenomena was shown to be due to light from glowing metals in the sun and stars, each metal having its own particular line or lines. In this work the prism was first used, but now a metal or glass flat surface is employed in its place. This is cross-ruled with parallel lines, so fine that there are 14,000 of these in every inch. They are separately invisible to the eye. By this means the sun's light is broken up into the most beautiful colors, every color in nature being thus produced.

So, from this line-grating we get knowledge of the sun's material, two lines in orange hue, showing the presence of sodium; one in red revealing hydrogen; and so on.

In finding sun heat the bolometer acts through the medium of the sun's ray. This is reflected through a telescope into the darkened observatory by a cœlostast, a set of adjustable mirrors, set out doors to catch the face of the sun, for spectrum work and for heat finding. The bolometer, in connection with the galvanometer, measures heat down to less than one-hundred millionth of a degree, being so sensitive that it is influenced even by invisible light rays.

The bolometer's use is founded upon the fact that when a current of electricity is flowing through a wire, this flow is checked if the wire is heated, and diminished nearly in proportion to the heat that falls upon it. In the interior of the cylinder are two wires, or tapes, made out of extremely thin strips of platinum, two tiny ribbons in width, like that of a human hair, but far thinner than wide. Only one of these at a time receives the heat or cold, which may be ever so small in quantity; but the elec-

trical current is thus controlled and so affects magnets, hardly larger than a needle's point, causing the little magnets in turn to affect a mirror about the size of a pin's head. This minute reflector casts a beam of light upon a measuring scale, right or left, according to the platinum current ribbon most affected, and so makes the desired record.

WHAT'S AN ANTHEM?

Some boys and girls may not have heard the definition of anthem given by one sailor to another.

"What," said Jack, "do you mean to say you don't know what a hanthem is? Well, then I'll tell yer. If I was to say to yer, 'Ere Bill, give me that 'andspike,' that wouldn't be a hanthem. But was I to say, 'Bill-Bill-Bill, giv-giv, giv-giv me, give me that-Bill, give me, that hand, give me that hand, handspike, spike-spike, Bill-giv me that, that hand-handspike, handspike-spike-spike, ah men; Bill, give me that hand-spike-spike, ah men!' that would be a hanthem."

DO NOT JUDGE BY CLOTHING.

Boys, do not judge a man by his clothing. A little incident occurred on one of the lines of street cars of this city a few days since which is worthy of notice. A poorly clad woman entered the car carrying an infant in her arms. As she sat opposite I observed she seemed troubled about something. When the conductor passed through the car for the fares she said, in a very low voice, "Please, sir, I have no money; let me ride this time and some other time I will pay you." "I can hear that story every day," said the conductor, in a loud, rough voice. "You can pay or get off." *"Two fares, please," said a pleasant voice, as a toil-worn and sun-browned hand passed the conductor ten cents.* "Heaven bless you, sir," said the woman, and long and silently she wept; the language of the heart so eloquent to express our hidden thoughts. This man in worn and soiled garments was one of God's noblemen. He possessed a heart to feel for the woes of others, and although the act was but a trifle, it proves that we cannot, with safety, judge a man by his clothing.—*"For many a true heart beats beneath a ragged jacket."*



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As THE ELECTRICAL WORKER reaches the men who do the work and recommend or order the material, its value as an advertising medium can be readily appreciated.

WASHINGTON, D. C., AUGUST, 1904.

JOHN MORRISON, Special Advertising Agent
25 Third avenue, New York City, N. Y.

*This Journal will not be held responsible
for views expressed by correspondents.*



THE HENRY E. WILKENS PRINTING COMPANY

MEMBERS are requested to stay away from Springfield, Mo. Strike on.

THE result of the referendum vote will be published in the September issue. Locals that have not voted will kindly do so.

A REPORT has been circulated that Brother John Breen, of Local No. 45, was killed at Richfield Springs, N. Y. We are author-

ized to say that the brother was seriously hurt, but is alive.

LOCALS wishing badges for Labor Day will please hurry their orders. Don't wait; delays are dangerous. Give the manufacturers time to turn them out.

The Blakeslee Forging Company of Plantsville, Conn., has purchased the right to manufacture the celebrated Donnelly climber. Their advertisement appears on another page.

THE ELECTRICAL WORKER.

It has always been our aim to make our official journal one to be proud of. How well we have succeeded we leave to the judgment of its readers. When we published all letters sent in there was a demand that the letters be cut out. Now very few letters are published, and some of the members are clamoring for the letters again. The editor has repeatedly asked that short letters be sent in each month, giving the conditions of work, not a long account of a smoker or open meeting, but the letters do not come. We again ask that short letters be sent in each month, and the same will be published. We have long ago recognized the impossibility of pleasing all, as we are aware there are many men who do not read the journals of their craft, or anything else. We do not try to please the fellow who floats through life like a chip in the water. We appeal to the thinkers, and any suggestions made that will improve the journal will be cheerfully accepted.

LABOR DAY.

Again the organized workers of the United States are called upon to show their strength on Labor Day, and we appeal to our members to get in line. Don't be a curbstone union man, but show your manhood by parading. Don't make it necessary to pass laws to fine you if you do not appear in the parade. Remember, Parry and his gang of money chasers want you to stand on the curb and try to be funny by guying good union men. Now show Parry and the gang that you are the Simon pure union man.

HAMILTON CARHARTT.

The firm of Hamilton Carhart has always been fair to organized labor, and it looks like poor business policy on the part of some competitors to circulate the report that this firm is unfair to labor organizations. It is to the credit of the labor press that they are doing all in their power to nail the lie, and we are satisfied that instead of doing harm, it will bring more business to this firm.

CHARTERS GRANTED IN JULY.

- No. 295—Little Rock, Ark.
- No. 224—New Bedford, Mass.
- No. 435—Winnipeg, Manitoba. 7/19/04
- No. 384—Muskogee, Ind. Ter. 7/20/04
- No. 426—Portsmouth, N. H.

INFORMATION WANTED.

If there is any local or brother who knows the whereabouts of Brother Clint Hawk will he please drop a line to the undersigned, as I have an important message for him? Last heard of he was in St. Louis. F. F. Loomis, 39 Viaduct, Akron, Ohio.

If Brother Frank Murphy should see this will he please write to Gus Hack for his tools and further information? Gus Hack, 2028 Pine street, St. Louis, Mo.

Anyone knowing the whereabouts of Mr. H. C. Brandt (last heard from in Hot Springs, Ark.), please write to Joe Harris, 2108 A Morgan street, St. Louis, Mo.

If this reaches the eye of W. J. Canlon, will he communicate at once with James Vessie, 130 Livingston street, Brooklyn, N. Y.?

NOTICE.

Locals are requested to notify Local No. 100, Jacksonville, Fla., before accepting cards from that local.

NOTICE.

Locals are requested to not accept traveling card No. 43271, carried by A. B. Johnson, out of Local No. 297, Piqua, Ohio. If presented, take up same and notify George

W. Ashton, 601 Covington avenue, Piqua, Ohio.

NOTICE.

I am instructed to give notice to the general office, through you, that there is a party by the name of W. C. Winchester working in Canada for the Canadian Cataract Power Company. This man scabbed on No. 41 all through the last trouble. He may try to gain admittance to the Brotherhood somewhere in Canada, so we take this means of letting all locals know his character as it pertains to us. Hoping you will take proper care of this fellow, I remain

Yours fraternally,

E. V. SOUTER,

Recording Secretary L. U. No. 41.
Buffalo, N. Y., July 30, 1904.

A REQUEST FROM NO. 3.

I am instructed to request, through you, that all traveling card men stay away from New York at present. We have had about 200 men out of work for some time past, and on Tuesday last all trades went on strike on the Rapid Transit tunnel, throwing 400 more out. We cannot tell how long it will last. It may result in a lockout, but hope not. If you will kindly publish this in the next WORKER you will oblige yours fraternally,

PAUL McNALLY,

Secretary No. 3.

New York, July 30, 1904.

A "CALL DOWN" FOR SECRETARIES.

Business in Worcester is very dull in all branches of the trade. We have given out a lot of traveling cards the past two months, so at the present time we have no more members than we had on April 1, although we took in over thirty in April and May. Some have deposited their cards in other locals and others have not. At least, we have no returns from many cards that have expired. I think some secretaries are not very prompt in notifying locals when cards have been deposited. A few months ago two brothers went to St. Louis, one a line-man, the other a cable splicer. We soon had returns from the line-man, but the splicer not a word. His card expired June 30.

NINETY-SIX.

Worcester, Mass., Aug. 1, 1904.

Reports From Grand Officers

Grand President.

On the evening of the 8th D. V. P. Allman and yours truly addressed a mass-meeting of Locals Nos. 54 and 446 of Columbus, Ohio.

The meeting was the means of adding quite a number of new members to our list in Columbus.

I arrived in Cleveland on the 9th, where I had been called by Local No. 39 on matters of importance. I attended meetings of Locals Nos. 38 and 39 on the 12th. My next report will contain the particulars as to my visit to the Forest City.

As arranged, I met D. V. P. Allman in Pittsburg on the 14th and attended the meeting of Local No. 14 on the evening of that date. We attended the meeting of Local No. 5 on the 15th, or rather part of the meeting, as an important conference prevented our reaching the electrical workers' hall until late.

While in Pittsburg I arranged to return to that city on August 3, to address an open meeting of Local No. 14.

Important business made it necessary for our staying in the Smoky City until the 18th, the details of which will appear in the September WORKER.

We arrived in Washington on the 19th.

As the concentrated action of Mr. Parry and his followers against organized labor is making the work of our organizers very difficult in everyone of our seven districts, it is the duty of every brother to render them all assistance possible whenever it is possible to do so.

It is not necessary for a local union to call the District Vice President to their aid on every assumption originating in the minds of our well-meaning brothers, who believe in the old saying, "Let's catch the bull by the horns," but never give the bull a chance to get in a position for anyone to catch him.

I have instructed all District Vice-Presidents to pay no attention to the calls of local unions that do not strictly adhere to Article XVI of our constitution.

So do not waste time and money in sending for the District Vice-President of your

district to come to your city if you have not followed the above article, as no attention will be given unconstitutional calls.

This will mean our organizers will be able to accomplish more in the way of adding to our membership in the future than they could in the past.

All locals should be careful in placing new demands before their employers, that they follow the constitution. Our Brotherhood has the reputation of having one of the best constitutions in existence, in regard to handling difficulties with our employers, as it prevents hasty and unnecessary strikes. It also prevents a local from taking unfair advantage of its employers.

As the result of having such an instrument to guide us, we have to-day trouble with employers in about three cities, as against eight times three a year ago.

This demonstrates that we are doing business on business lines, as our chances for having trouble are just as great as that of any other organization similarly situated.

It is up to each and every member of our Brotherhood to do his share of the work necessary for us to keep on marching in the procession of justice and right until we reach the highest pinnacle of success when those brothers who sacrificed so much for our cause will be rewarded by seeing our fundamental principles enjoyed by all electrical workers in this broad land.

F. J. McNULTY.

Pittsburg, Pa.

First Vice-President.

My last report was made out while at St. Louis. We finished our work there July 7. I attended a meeting of Local No. 45 on the 9th. They are building up slowly, but as fast as can be expected, owing to the dullness in the trade, but if the members continue to take an interest in their local in the future, nothing can prevent them from having an organization to be proud of.

I had been ailing for some time and on the 11th I was taken sick, which kept me in bed until the 26th, but am glad to say I have recovered and am again on deck,

feeling as well as ever. I have received several letters from various locals notifying me of their grievances and trouble they expected to have. In many cases I find the employers have been the direct cause, through their actions in bringing about strikes, thinking thereby to influence public sentiment against unionism. I also find that on large jobs where the contracts are to be completed at a certain time unless delayed by strikes, the contractor, toward the completion of the job, finding the time specified in the contract is too short, takes advantage of the strike clause in order to save himself, and at the same time endeavors to convince the public that the unions are at fault for the delay in public progress. Local No. 3 has a strike on the rapid transit tunnel, which was started on the 26th. Between 275 and 300 members are at present involved, with prospects of a larger number if a settlement is not reached in the near future.

F. J. SWEET.

Second Vice-President.

I herewith submit the following report for the month of July:

As the executive board was in session till July 7, I did not arrive home till the morning of July 11, and as my mail had accumulated during my absence I answered all letters as speedily as possible. Matters remain the same as when I left, with the New England Telephone Company and Local No. 104. I attended their meeting on the 12th, and, in company with Brothers Birmingham and McInnis, I called upon Superintendent McCoy the next day, holding a conference for about three hours, and succeeded in getting no better satisfaction than previously given, and that the rule laid down by the company was to be observed. There were many matters discussed at the meeting which I feel would be very unwise to enumerate in my report, but the same is pretty well understood by the members of Local No. 104. On Wednesday I went to Newport, R. I., and called committee from Local No. 268 together for the purpose of holding open meeting on Friday, the 15th. All hands took hold and I canvassed the men personally the next two days, getting many

promises, but not a great many put in an appearance at the hall. However, those who did come joined our Brotherhood, and they were made of the proper stuff. I must say we have some good, loyal brothers in Local No. 268, who thoroughly believe in the principles of organized labor. On Saturday I came to New Bedford, having been here previously, and finding the proposition a tough one. I tried to collect from those who had signed at that time, but only three had the moral courage to stand by the signatures they placed upon the application for a charter. I was then more determined than ever, and by hard and persistent work I got enough money to send for a charter. On Tuesday, the 19th, I was obliged to go to Boston, and report for committee on the New England Telephone matter. The meeting was not as largely attended as I expected, but the whole matter was turned over to the executive board, where I gave some instructions that I hope will be carried out. I must say that if the men who are directly interested in grievances with the companies they work for would attend meetings more punctually and make their wants known, also take more part in affairs that are of vital importance to them, they would have more success. The days of fearing the boss are past and gone; more respect is shown to men when they will stand up without fear and show their colors. The law to-day gives a man a right to defend himself. While it may not look so to many, I am pretty sure if a man keeps within the bounds of civility he need have no fear. I sincerely trust the members of Local No. 104 working for the Telephone Company will attend more punctually to their meetings immediately and not let the few who have struggled for years to elevate the cause try to shoulder the whole load. Let all hands work together collectively. (Just see what has happened to the beef trust.) I returned to New Bedford Wednesday and got some more applicants, organizing new Local No. 224 in that city on Thursday, the 21st, with more than half the workers in that town for a starter. The boys of that city now have a good start and should be able to hold together, as there are but six left outside the breastworks. Friday I went to

Taunton, Mass., and learned there were but seven linemen in that city and three contracting firms, who did inside work, and the bosses constituted all the wiremen. So I concluded there were better fields to labor in for the present. Having received a message to come to Newport at once, upon my arrival I learned that Brother McCann was killed on a pole from shock. It was no surprise to me, for the line work in that city was in a deplorable state. In fact, a citizen of that city went to city hall with me the day before I left. I got a city ordinance, and found the rules in relation to the erection of poles and installation of wires to be in a very crude state, and found that the first chief was supervisor of all ariel wires throughout the city. Knowing that if I made a protest at that time I would have the same old cry thrown at me, that I was not a resident, and they did not want outside interference, I concluded to let the matter rest for the time being, as it might have made it unpleasant for some of the men, but four days having gone since the life of a poor lineman was sacrificed, and knowing that the lives of the others were in danger, I immediately took up the matter with the mayor of the city, who requested me at once to go over the lines and discover every defect I could, and report the same to him, which I did, and learning of a great many surprises he wanted me to attend a meeting of the city council, when the matter would be taken up to change the present rules now in force in relation to that kind of work. Having gone over the matter with the fire chief (who is a bricklayer by trade) and others in authority, too numerous to mention at this time, I feel satisfied that the necessary improvements will be made to guarantee a little more safety.

But it is horrible to think life must be sacrificed before any action can be taken, and, again, these companies are well aware of the condition the work remains in. I will say that other cities are in just as precarious a condition. Too much credit cannot be given to the members of No. 268 for the respect shown to our deceased brother and the interest taken in behalf of his widow and family. Brother Toomey, in particular, demonstrated a loyal spirit

in stopping work and raising a handsome sum to be presented to the family of Brother McCann. We certainly are badly in need of more such good workers as Brother Toomey. Having done all I could in Newport for the time being I came to Portsmouth, N. H., on the 23d, getting after all hands in the different companies and those employed in the navy yard. I succeeded in organizing new Local No. 426 on Friday, the 29th, with twenty-four members. On Saturday I came to Dover, N. H., and before this week passes I will place a charter in this city.

Now, I must beg of all locals in my district to give me a chance to organize and not call me here and there on petty differences. Could I get what cities that need to be organized I could then come around to those that have become weak. By all means keep our charters intact, work upon business lines, study your constitutions, and you all know that no mistakes can then be made. And, further, that every act of mine will be strictly in accordance with the laws laid down by the constitution of our Brotherhood. I have visited all locals but two up to the present time, and I am sure if left alone for a few months to organize, several new locals will be added to my credit. Now, above all other times in the history of organized labor, we need activity; we need more recruits. Let each member do his duty and try to bring in every man who at present is outside the fold. If I can get them in strange places, why not the men who work among them as comrades? I appeal to all brothers to put their shoulders to the wheel. The sooner we get thoroughly organized the greater the benefit.

E. T. MALLORY.

Dover, N. H., July 31, 1904.

Third Vice-President.

At the close of my last report I was in St. Louis, attending the meeting of the Executive Board, which lasted till the night of July 7, when we adjourned, and I left for Columbus, Ohio, where, with G. P. McNulty, held an open meeting, which was very well attended, and resulted in Brotherhood getting seven more members; also

putting new life into the movement in that city.

On the 9th went to Marion, Ohio, where I found local had disbanded, as there was no work in or around there, and members had taken traveling cards, floating to some other city.

On the 10th went to Toledo, Ohio, and Monday visited Bowling Green, where I had been informed they wanted to start a new local. After investigating I found 12 men in the city working at the business, two with good cards, four in arrears, and six who never did belong.

Work would only last about six weeks or two months, when all but about three or four would float out. As there would not be enough men left to hold a local together, had men in arrears promise to pay up and men who don't belong are going to join, some going to No. 245, others to No. 298, as Bowling Green is about half way between the two locals.

At night I attended a meeting of No. 8, where some members of No. 245 were, and will say in that city members do not take enough interest in their local to attend meetings and help the officers transact business, brothers coming to meeting and staying just long enough to pay their dues, get marked present, and then retire.

On the 12th went to Lima, Ohio, attended meeting of No. 32, where I found a very good local; have about all the men working at business in and around Lima in No. 32; also all the members taking an interest in their local.

✓ On the 13th went to Youngstown, Ohio, where trouble was on between the engineers, firemen, oilers, and ash wheelers at light plant, which also owns and operates the street railway between Youngstown and Sharon.

They wanted the electrical workers to go out in sympathy. This I refused to stand for unless the motormen and conductors, who were union men working for the same company, would go out also.

This the executive officer of the street railways said they would not do, and I then notified our members to continue at work.

Right here I wish to say, our members are always ready and willing to go out to assist some other craft, but I have yet to

find any other craft going out in a body to assist the electrical workers.

On the 14th went to Pittsburg, where I again met G. P. McNulty, and together we attended a meeting of No. 14. There were quite a few members present, but not near what there should be for a local the size of No. 14.

On the 15th, with the Grand President, met a committee from No. 14 to talk over the strike against the P. & A. Co., and later attended meeting of No. 5, which I must say was not very good, as there are two factions fighting one another, instead of pulling together, but I hope after the talk they received from the Grand President they will bury the hatchet and pull together.

On the 16th, with Grand President and Brother Nickols, president of No. 14, called on the superintendent of the P. & A. Co. in regard to strike that is on against said company by No. 14. Met Mr. Splane, who said he was very busy, and could not grant us a hearing that day, but promised to meet us Monday at 2 p. m.

On the 18th, with the Grand President and Brother Nickols, called on Mr. Splane, as was arranged. After going over the trouble Mr. Splane stated what the P. & A. Co. would do, and asked the Grand President when he would be back in the city. He was told in a couple of weeks.

He then told committee to call around and see him, at which time I think the trouble will be settled.

That night the Grand President and myself left Pittsburg for Washington, D. C., where I was to meet G. V. P. Smith, as was ordered by the executive board at the meeting in St. Louis, to investigate and find out if there was any way of reducing the expenses of the Brotherhood. I was in Washington six days, and our report will be sent out to each local, after it is approved by the executive board, who now has it.

On the 24th I left Washington for New York to place before G. V. P. Sweek, who is chairman of the executive board, and also one of the committee on finances to go to Washington, what G. V. P. Smith and myself had done, but could not on account of being sick.

On the 25th I went to Philadelphia, where I am at present working in conjunction with Brother Meade, business agent of No. 98, to try and unionize the non-union electrical workers in this city. Attended meetings of No. 98, No. 240, No. 287, and No. 21; find a few members of all branches loafing but cable splicers, who are in demand just at present; and anyone appearing had better have a good, paid up card.

E. P. ALLMAN.

Philadelphia, Pa., July 31, 1904.

Fourth Vice-President.

On closing my last month's report I stated I was at the executive board meeting in St. Louis, Mo. I will not attempt to tell what was done, as it will come out in *THE WORKER*, but I think there was a lot of good accomplished, as the executive board were practically strangers before the meeting, and now we know the different ideas of the men and it cannot help but do us good, and also the rank and file.

We left there on the 7th and went to Wheeling, W. Va., and attended the regular meeting of No. 141, with good attendance. There were several members from No. 142 at the meeting, and that is what I like to see—the outside men attend the inside locals and *vice versa*, for in some cities we are more like different crafts than men who are carrying the same banner.

On Sunday morning I held a special meeting of Local No. 142, as the scale for linemen for all companies was \$2.75, and the Wheeling Traction Company was paying \$65 per month for all men. They appointed a committee to go with me to see General Manager Neagle, of the company. After finding him we had several hours' talk with nothing accomplished, but we made another appointment with him for the next day, and after considerable time we settled on the basis that we allow him two men for emergency at \$70 per month and the rest of the men at \$2.75 straight time, time and one-half for nights, and double time for Sundays. I attended the regular meeting of No. 142 on Wednesday night, July 13, which was a grand meeting, and we opened the meeting for a while, and several non-union men were there. I trust the talk I gave them will do good. On the

14th I went to Parkersburg, W. Va., and had called an open meeting, which was poorly attended, as they have never fully recovered since the last strike, one year ago. I want to see them get in the same line with their sister locals in Wheeling. On the 15th I went to Cumberland, Md.; arrived at 8:15 a. m., and found Brother McGill, president of Local No. 307, who laid off that day, and we went around to see all non-union men in the city, and we found two cranemen, one electrician, and two turners out at the steel mill, and invited them to join, which I think they will do in a short time. We held an open meeting, with fair attendance. The president of the central body and the president of the Typographical Union were there and gave us a nice talk. On the 16th I attended a regular meeting of Local No. 431, Frederick, Md., with very good attendance. This is a small place, and they have only a few members, but those they have are loud enough. On the 17th I arrived at the general office, as per instructions of the executive board. On the 18th Brother McNulty and Brother Allman arrived, and our work while there will be published in another place in *THE WORKER*, but while there Brothers McNulty, Allman, and myself attended regular meetings of No. 148 on Wednesday night and Local No. 26 on Thursday night. We have two good locals in Washington.

I received a telegram on the 22d from Wheeling, W. Va., that the Home Tel. Co. had put two ground men to climbing poles. I wrote them to appoint a committee to go to the company, and follow Article XVI of our constitution, and on the 25th I received another telegram that there was no chance of a settlement, and to come at once. I left at 11 a. m., and arrived in Wheeling at 10:30 p. m. A committee met me at the train and explained the situation, and the next morning the committee and I went to see Mr. Handley, the general manager, and he was too busy to see us, but asked us to call at 8 p. m., which we did, with the arbitration board from the central body. After a few hours' talk Mr. Handley told us he would let us know at 7:30 p. m. next day, and when we went to see him again he agreed to keep the ground men off the

poles. There is a case where the men followed the constitution and they never lost any time. If all locals would adhere strictly to the laws laid down at our last convention we would have a great many less strikes and get along better. I attended the regular meeting of Local No. 142 on the 27th, and on the 28th I left for here. Have met most of the boys here in all three locals, and have the promise of several non-union men to attend the meetings of this week. I have an open meeting of No. 27 to-night, No. 46 Wednesday night, and No. 28 Thursday night. The fire they had here in February certainly will make lots of work in Baltimore, but they seem to be slow in getting at it, as they are widening the streets, and there are some idle men in town now, but will need a few more in a month or so. The local will notify other locals when they need men.

I have called a convention in Atlanta, Ga., for the 23d of August, to get up another wage for the Southern Bell Tel. Co., and to form a district council, which I hope will be well attended.

DALE SMITH.

Baltimore, Md., Aug. 1, 1904.

Sixth Vice-President.

I left St. Louis on the 8th, after the adjournment of the executive board meeting. I arrived in Little Rock, Ark., on the 9th, and found local conditions there in very bad shape. The brothers had lost interest in union matters and did not attend their meetings. So the few that did attend became disheartened, and from all reports there were some members very anxious to see the local break up, which was finally the case. After the charter had been sent in the inside men got together and applied for a charter, and the old number—126—was given them. After one week's efforts I succeeded in getting the outside men together. Had a meeting on the 14th; organized and applied for charter. On the 15th I went to Hot Springs; found Local No. 215 in very good condition. Owing to the scarcity of work there the union has dwindled to a very few members. There are a few men who do not belong. Those that I talked to promised to come in. On

the 19th I went to Pine Bluff, Ark. According to the directory of the the WORKER I should have arrived there in time for the regular meeting of No. 251, but found when I got there that they had changed their meetings from twice a month to once a month. We were unable to secure a hall for the 20th, so had a special meeting on the 21st, which, I am sorry to say, was not as well attended as I would like to have seen. On the 22d I went to Little Rock; called a meeting of the outside men for the 23d and installed charter No. 295. There are a number of brothers there who will deposit their cards, and I think they are going to have a good local. I think the men who were elected officers will take an interest and do their duty. On the 24th I left for Muskogee, I. T., as I had been notified by our Grand President that Muskogee had applied for a charter. I thought I would be there in time to install it, but I was one day late, as the charter had arrived, and Brother Leach, organizer for the A. F. of L., had gotten the boys together on Sunday and installed the union. I tried to have a meeting, but most of the boys were working out of town at that time, and it was impossible for them to get in. I met all that were in town and several that had not joined, but they promised to come in right away. On the morning of the 26th I went to Wagner, I. T., and spent four or five hours there. I found four men working in the town. I talked with them in regard to going in at Muskogee. They talked very favorable, and I left some applications with them. I think it will only be a short time until they will get in line. I returned to Muskogee in the afternoon. On the 27th I went to Denison, Texas. I arrived there too late to have a meeting that night, but met the boys the next day and it was decided that we notify Local No. 272 of Sherman that the members of No. 338 and myself would be over that night to have a joint meeting. We all went over and had a good meeting. We had several talks by different brothers and myself. At the meeting the arrangements for Labor Day were taken up. It was decided that No. 272 would go to Denison and parade with No. 338. Committees were appointed to make all arrangements.

I am glad to see the two locals working together so nicely. On the 29th I went to Greenville, Texas, and found things there in very bad condition. There are only a few men left there, and the local is several months behind with its per capita to the General Office. I got the boys together that night and checked up the books and they promised to straighten up with the General Office at once, and continue business. On the 30th I left Greenville for Dallas. I expect to spend the next few days in the interest of Locals Nos. 188 and 69, as they are in need of my attention.

J. P. CONNOR.

Dallas, Texas, July 31, 1904.

Seventh Vice-President.

I left St. Louis on the morning of the 9th and arrived in Kansas City at 6 p. m., where the train was stalled for twenty-eight hours in the East Bottom, caused by the Kaw River having overflowed. We left there on the evening of the 10th and had the engine die on the track after we had been out two hours. We sidetracked until morning, when another engine arrived, and we proceeded on our journey.

Nothing of note occurred during my trip to Salt Lake City, where I arrived on Wednesday, the 13th.

In Salt Lake, I attended the meetings of the different locals and had them appoint a committee on organization, they to correspond with the different locals in the territory covered by the Rocky Mountain Bell Telephone Company, to see if it were possible to organize a district council, as we find that if we wish to handle such companies as the Western Union, Postal or the Telephone companies, successfully, we must handle them in this manner, an individual local that goes up against them has about as good a chance as an individual has going up against one of the local electric light plants.

From Salt Lake I went to Ogden, where I attended the meeting of Local No. 316 and I found a by-law in vogue that would more than please the heart of the most radical advocate of the late lamented "High Board Fence." There was a section in it which called for a two-thirds majority vote before they would admit a traveling

member whose card was paid up. Hereafter that section will be considered obsolete.

As I could not make connections to get out of Ogden on Sunday, I spent the day in the Canyon with several of the brothers of Local No. 316, and I wish to thank the brothers and the local for the courtesy extended to me on that occasion. On Monday I was on the road once more, rolling toward 'Frisco, where I arrived on Tuesday night, and as I was completely tired out, I did not attend the meeting of Local No. 151. As my mail had been accumulating for five weeks, I spent Wednesday going over it. Local No. 6 meets on Wednesday, but I thought I was entitled to a rest, and took it.

Among the mail was a communication from Missoula, Mont., with a wage scale which they wanted me to approve. They stated that they wished my approval, as the constitution required it. The companies had already signified their intention of signing it, and as it was a pleasure to receive such a communication, I wrote them, approving the same. While in Salt Lake City, before going to St. Louis, I had received a letter from the local in Helena, Mont., stating that the superintendent of the light plant, who was also the president of the Citizens' Alliance, had requested the members who were working for that company to quit the union or quit the job. They, with the exception of one individual, by the name of Roderick McDonald, quit the job. I telegraphed them to find out if they wished me to go on the ground, and received an answer that they had everything well in hand, and did not think it was necessary. Since then I have learned that they have not only been successful in their fight, but have made it (the job) a closed shop, which it had not been before.

There was a letter from Local No. 289, of Santa Cruz, stating that some differences existed between them and the painters and plumbers, and requesting that I should go on the ground, as they feared that if the matter was not straightened out, their local would go to pieces.

As there were several matters that the advisory board was handling which they wished to consult with me about, and I had

other matters to turn over to them, I put off going to Santa Cruz until Saturday morning, having attended the meeting of Sub-Local No. 3, of Local No. 6, on Thursday night, and the meeting of the advisory board on Friday. On arriving at Santa Cruz I immediately started out to find the president of the local. While searching for him, I located Brothers Leslie and Martell, formerly members of Local No. 61, of Los Angeles, who gave me valuable information in regard to the conditions in Santa Cruz. Brother Worthington, of Local No. 151, was there on a vacation, and I immediately got him to help me out. We had a meeting in my room on Sunday, with the prominent members of the local, and decided that all that was necessary to put Local No. 289 in good shape was to get the committees to do the work assigned to them.

We went to Monterey to see the members of the local who are working there, and while we were not successful in seeing them, we did run into some ex-brothers, whom we induced to straighten up their cards. They assured us that they would get a few more of the boys who were working in the neighborhood to join. We went to Watsonville, and found the card men doing well. We attended the meeting of the Building Trades Council on Wednesday night and straightened out the differences that existed between our boys and the plumbers and painters.

On Thursday night, we attended a meeting of the local, and found that there were only a couple of the wire pullers there who were not in the union, but they had already promised to become members.

On Friday, I returned to Frisco, and have been busy since trying to get the non-union men to come into the Brotherhood.

M. J. SULLIVAN.

San Francisco, August 1, 1904.

AFFAIRS IN LOS ANGELES.

Conditions, electrically speaking, in the jurisdiction of Local No. 61 are not very encouraging, nor are they deplorable; could be better and yet much worse. There is just enough doing to keep all hands and the cook busy, and therefore out of mischief. Sub-Local No. 1, of Pasadena, is in a

flourishing condition and fully capable of caring for herself. Also the new local union just established at San Diego is healthy and doing business in her own style. There comes a cry from Santa Barbara for a sub or new local union. This in due season will receive our attention.

On the whole, Southern California has the appearance of having something good in store for us, providing, however, the boys will let bygones be bygones and try to establish themselves in the good graces of their late and new employers.

C. P. LORTHOUSE.

UNFAIR.

Will you kindly give space in your valuable journal for the following resolution?

Resolved, That the Burrell Construction Company, R. W. Wakefield and J. Bennett, who now have contracts to erect buildings at the Lewis and Clark fair grounds, be declared unfair, and advertised in all the leading trade journals as such.

ROBERT ROBSON,

Recording Secretary District Council.

Portland, Ore., July 27, 1904.

DOINGS AT DETROIT.

It may interest some of the old members of No. 17 to learn of the graceful testimonial given former Business Agent E. G. Smith at the recent election of officers. Brother Smith was elected president of No. 17 without a dissenting vote, and that loyal old warrior, George Burns, elected recording secretary. Brother Stubenvolle, for two years financial secretary, goes to the vice-president's chair, and F. H. Ellsworth, recording secretary to fill Brother Smith's unexpired term, was elected financial secretary, treasurer, and press secretary. The co-operative company is doing some cable work, but the conditions there are not just right, and the bunch of card men walked out a short time ago. No strike on, but the company is trying to violate its agreement. It looks bad at present, but we have a good committee at work on them, and look for results. Bell about the same as usual. Edison could probably use a few A1 linemen. Otherwise not much doing.

ELLSWORTH.

Detroit, Mich., July 8, 1904.

AN UNJUST BOYCOTT.

WHICH IS DOING A GREAT WRONG TO A WELL-KNOWN FRIEND OF ORGANIZED LABOR.

A mysterious agency has for the last year been operating in various cities against the sale of the goods of Hamilton Carhartt, of Detroit, Mich. This agency, unseen and up to the present time unfathomed, has had the effect of bringing about a boycott, yet it is a boycott which no labor organization can be held responsible for. No union has issued a boycott circular against the firm, no labor leader has given public utterance to any criticism of it, and no member of a union has entered complaint against it. The firm, as has been its uniform custom,



HAMILTON CARHARTT

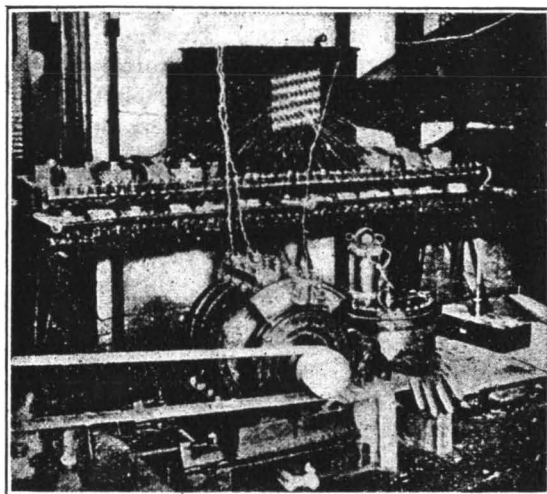
employs only union labor. It manufactures only label goods. Conditions in its factories are equal to the best anywhere, and Mr. Hamilton Carhartt is known throughout the country as a model employer and a public spirited citizen, who never overlooks the welfare of his own employees. Yet, despite the character of this house and its employment of the union label, the attack on the sale of its goods seems to be systematic and widespread. Items occasionally appear in the papers announcing that Mr.

Carhartt, while professing friendship for the union cause, is nevertheless continuing his connection with the American Manufacturers' Association, of which Mr. D. M. Parry is president. Such news items are photographed and widely circulated by some agency. Information has been received from one town and then another that its goods were having a sale less than the usual average, and in one of the minor cities of the South sales have almost completely ceased. As a result the house has been obliged to lay off a number of its operatives, and it is seeking to ascertain the cause of the campaign against it. As to this cause the United Garment Workers of America is as much in the dark as Mr. Carhartt himself. It has given him the same unqualified support that it extends to all label houses. It has endeavored to find out the reason for the decrease in the sale of the firm's goods, but without avail. Some one has suggested that Mr. Carhartt's membership at one time in the American Manufacturers' Association may be the foundation of rumors against his reputation as a union employer. Mr. Carhartt was a member of that body before the days of Parryism, and for a time after the appearance of Mr. Parry and his anti-union supporters, he remained in this organization simply for the purpose of combating the rising anti-union sentiment. This was at the time so widely known that there could hardly be any misconception of the facts on the part of any intelligent observer. That Mr. Carhartt should at this late day, long after severing his connection with the association, be made to suffer because of his sins, instead of being rewarded for his own courageous course while a member of it, would be an example of the rankest injustice.

The unions of all trades throughout the country, wherever the Carhartt goods are on sale, would do well to inquire into the matter and see that the firm should be given the fair field to which it is entitled. Moreover, if the underhand methods injurious to it can be explained by any union man, it is his duty to come forward and throw all the light he can upon the subject. —*Weekly Bulletin, official organ of United Garment Workers.*

SUBMARINE ELECTRIC CABLES

FROM recent investigations in the botanical possibilities of the Philippine Islands, many forest products that may have a profitable influence on commerce and be of great benefit to this country, have been found worth giving considerable attention. Among these products are



PUPIN TELEPHONE GENERATOR

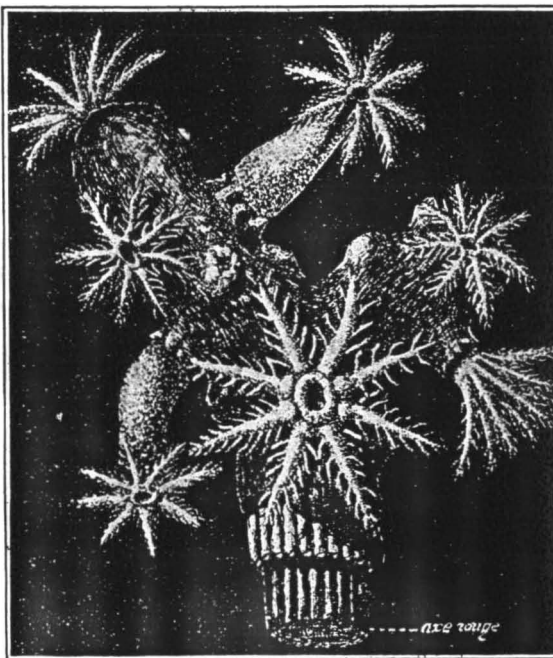
two which play a most important part in matters electric—not for poles for holding wires, nor are they “electric trees” or “electric bushes,” to which one could hitch a wire and so start a plant—not an electric plant. They are gutta percha trees and rubber “vines.”

In the matter of rubber it may be stated that in the United States alone 100,000,000 pounds are being used annually, and that any new source of supply is gladly welcomed and taken advantage of. The supply for this country comes from the Amazon valley, where by bad management of the natives the rubber trees are being rapidly destroyed. The European supply comes largely from the East Indies, where both rubber and gutta percha are cultivated with great success. There are no rubber trees in the Philippines except those carried there for experimental purposes, but from the vine mentioned commercial rubber is obtained. The vines are of two varieties, one growing from twenty to sixty feet long, the other to as much as three hundred feet. When tapped they yield a milk like that of

the best rubber trees; but the natives after getting this mix it with the juice of the gutta percha, as they do not know the difference between the two products, which have to be separated, in the coagulated state, by the manufacturer. The vine rubber material averages about 81½ per cent pure rubber, the other matter contained being resin, water, and dirt.

The principal use for gutta percha, until a comparatively recent date, was for wrapping wires to secure perfect insulation and to prevent the effect of salt water on ocean cables; but now the golf ball is making extensive demands on the output of this product. The supply comes from the Malay peninsula, Borneo, Sumatra, and the Philippines, though not much is yet produced in the latter place, but what is obtained brings in its adulterated state about 33 cents per pound.

Gutta percha is gotten from the milk of a tree botanically known as *sapotaceo*. These trees grow wild in the Malay peninsula and Philippine forests, being cultivated in Sumatra and Borneo. In the latter country cultivation of this tree has been very suc-



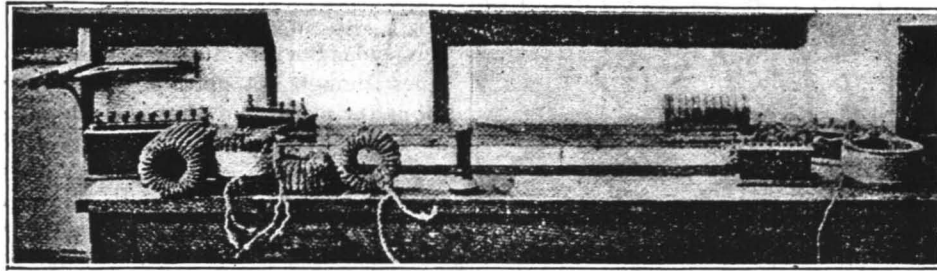
SEA COMPANIONS OF THE CABLE CORAL

cessful and fortunes have been made there in the gutta percha industry.

It is well known that rubber is largely used for electric wire insulation, for electric vehicle tires, for electricians' gloves and for other purposes in this connection; but the manner of employment of gutta percha for underwater electric cables is not so familiar to the public.

The submarine cable service of the world is an enormous business interest. Taking figures of some years back (cables are not laid every year), for about 1890, we find that this consisted of over 120,000 nautical miles of cable, the cost of which was near

sists of a strand of seven fine copper wires. This, of course, is the center of the cable. In the process of making the latter the fine wire strand is drawn through an adhesive compound, which causes the coating of gutta percha next applied to stick closely and prevent the formation of air-bubbles between or around the conductor strands. After the initial process is completed four more coats of sticky compound and plastic gutta percha are put on. This finishes the insulation and completes the "core," which is now put into a water tank, electrically charged, and tested for current leakage through the gutta percha envelope.



PUPIN LONG-DISTANCE METAL COILS

\$200,000,000. The greatest part of this system belonged to the Eastern Telegraph Company, the lines running from England to India, and aggregating 21,860 miles. There are about eleven cables crossing the North Atlantic.

For laying new cables, repairing broken ones and looking after the underwater cable system of the world generally between thirty and forty vessels of various sizes are employed. A number of these vessels are large, and sometimes when laying cable, carry from four thousand to five thousand tons of it. It will be seen from this that ocean cables are heavy conductors of electric current. But they vary greatly in size, the largest being over two inches in diameter.

The making of these long "ropes" of metal, fiber, etc., requires great skill and as much care as is used in making a fine watch, for the cable, concerning strength and the prevention of current leakage, must be absolutely perfect. A leaking cable under sea is more worthless than a leaky ship on sea.

The electric conductor in the cable con-

sists of a strand of seven fine copper wires. This, of course, is the center of the cable. In the process of making the latter the fine wire strand is drawn through an adhesive compound, which causes the coating of gutta percha next applied to stick closely and prevent the formation of air-bubbles between or around the conductor strands. After the initial process is completed four more coats of sticky compound and plastic gutta percha are put on. This finishes the insulation and completes the "core," which is now put into a water tank, electrically charged, and tested for current leakage through the gutta percha envelope.

The completed product is coiled into a water filled tank, kept thus for sometime and subjected to electrical tests. From here it is run by machinery over guides on floating supports and into the cable-laying ship, being coiled away, after receiving a coat of whitewash to prevent the coils from sticking together, in circular tanks.

When the line-laying begins the shore end of the cable is floated to the shore station by means of small balloons attached at

space intervals along the line to prevent rubbing on the bottom. This accomplished the ship steams seaward, the cable unwinds from the tanks, passing up from the ship's hold, going over guides and pulleys, taking several turns around a big revolving drum, running under a dynamometer, engaging the stern sheaves, and then falling easily into the sea to sink to its "final rest."

These resting places are chosen after much careful sounding and mapping, for it is necessary to obtain as level a bottom as possible. There are deep "holes" in the sea's floor—some many miles in area and miles deep—also high submarine hills and mountain peaks occur; and these must be avoided, for the enormous weight of the cable would possibly cause it to break if it were stretched across a deep sea valley or bent in a deep, wide hole.

Gutta percha is the ideal material for enclosing ocean telegraph and telephone cables. In one system (the Pupin) of submarine telephony more of this material apparently would be required than for the telegraph cable, on account of the enlarged coil-holding sections. The Pupin system claims to have that which is most wanting in long-distance telephony—distinctness of tone, the ability to hear correctly all that is being said over the cable. Of course, the increasing weakness of sound force as distance increases interferes with this; but the Pupin coil, it is claimed, while holding back current, but not consuming power, does not interfere with the transmission of energy over the cable, but by diminishing the current diminishes in a greater ratio the loss on the line and preserves the characteristics of the electric waves, delivering to the receiver the energy in the form it came to the line.

The coils consisting of an iron core composed of sheet iron rings two one-thousandths of an inch thick, are placed together, forming a hollow cylinder wound with conducting wire, threaded through the center. For ocean cables they are supposed to be placed one-eighth of a mile apart.

It is claimed for the Pupin system of telephony that by multiplex transmission on ocean cables a speed of 1,500 words per minute could be attained, while forty words

per minute is considered high speed for an ocean telegraph line.

THE UNION SHOP.

While much is being said about the open shop it is highly improbable that there will be any attempt to enforce the change on a large scale. As yet the opponents of the union shop have made all the noise. But the arguments advanced are so superficial and the alleged statements of facts so palpably unfair, that many unionists do not think them worthy of reply.

The talk we hear about the "inalienable right to work" is pure buncombe, as such a right does not exist, except in the sense that a book agent has a right to sell his wares. It is patent to the most obtuse that there would be no involuntary idleness—no long, weary tramps from shop to shop in quest of a job—if workingmen had a "right to work." What the luckless unemployed do enjoy is the right to seek employment, which is a far cry from the much-talked-of "right to work." Another form of stating the anti-union case is to say the closed shop infringes on an employer's right to hire whomsoever he may please. This is one of those half truths which are more misleading than a falsehood cut from the whole cloth. No one, and least of all, sensible trade unionists, seriously denies the exercise of this right to an employer; but this concession in no way impairs the right of ten or a hundred employes to refuse to work with an obnoxious craftsman. That is what union men do in some instances; they do not in reality ask that a man be discharged, but simply refuse to work with him. Associations of lawyers and physicians do exactly the same thing, saying the objectionable one has been guilty of "unprofessional conduct," or "violation of the ethical code," while the unsophisticated workmen, with commendable frankness, but deplorable lack of finesse, blurt out that the object of their hostility "is a scab." The underlying cause, and the purpose in view, are the same in both instances, but few, if any, seem to find fault with the professional associations. The homely admonition that "It is not so much what you do as the manner in which you do it," seems to apply here.

Many good reasons are advanced in de-

fense of the union policy, but it is not the purpose to discuss or even outline them here. There is abundant evidence that these arguments presented fairly, appeal with force to the general public.

A well-known educationalist, who has made a special study of labor unions, says he finds it easier to convince people of the mercantile and professional classes with whom he comes in contact, of the fairness of the card-shop policy than of any other phase of militant unionism. The writer also knows of a club of twenty or so men, not one of whom has a remote connection with the wage-earning class, who, after investigation, think the strict union policy is justifiable, if not a necessity, under existing conditions. Some of this is due to the feeling of revulsion that accompanies the discovery that what has been written on the subject is a riot of misrepresentation. This also demonstrates that unions will not be without forceful and friendmaking arguments if the matters get beyond the academic stage.

It is stated above that in many instances union men refuse to work with non-unionists. In explanation of this it must be remembered that, contrary to current general belief, exclusion of non-unionists from the workshop is not a cardinal principle of all unions. The members of some organizations work with non-unionists, and though it may be true that many of these are weak sisters, yet some of the strongest and most successful unions are in this category. The determining factors in shaping the policy of the various unions will be found to be the economic conditions surrounding the various industries. If an industry is conducted in such a manner that non-unionists cannot be utilized to menace the position of the unionists, the lines are not drawn tightly, and the most determined and effective opponents of the closed shop are among the unionists of such crafts. On the other hand, if circumstances are such that the non-members may be instrumental in endangering wages or working conditions, their employment is looked on with disfavor.

Trade unionists are aware that this policy has its weaknesses, the principal one being the impressment into the union of men who

are unconvinced of its efficacy or desirability, and who are consequently far from being a source of strength. There are also unionists in the printing trade organizations for whom the open shop has no terrors. They believe any possible temporary decrement in membership following its institution would be more than offset by the progressiveness resultant from relief from the load of dead wood. It is a surety the unions would have to "spruce up" and pay more attention to those features that attract non-unionists. But this untterrified minority is seldom heard from, for its dreamy speculations are answered by the assertion that the open shop in the printing trade would lead to the adoption of unfair practices and reduction in wages by unscrupulous employes with the inevitable climax that fair and generous employers would be compelled to do likewise. In this way the workers reduce the question to a dollar-and-cents proposition—and that is plainly what it is. Notwithstanding all their grandiose talk about "sacred rights," it is as plain as noon-day that most of the advocates of open shops think they see "money in it." Their love of liberty is a newly-found emotion, but the pursuit of the dollar—clean or dirty—has been the ruling passion of their lives, and it is too much to ask us to believe that their grand passion has naught to do with their present hysterical situation.—*W. B. Prescott in the Inland Printer.*

Almost \$32,000,000 has been paid in benefits of various kinds by the Amalgamated Society of Engineers during the past 35 years.

It is reported that the Standard Oil Company has obtained control of the entire output of the Ontario asbestos mines, from which comes all but a small percentage of the world's supply.

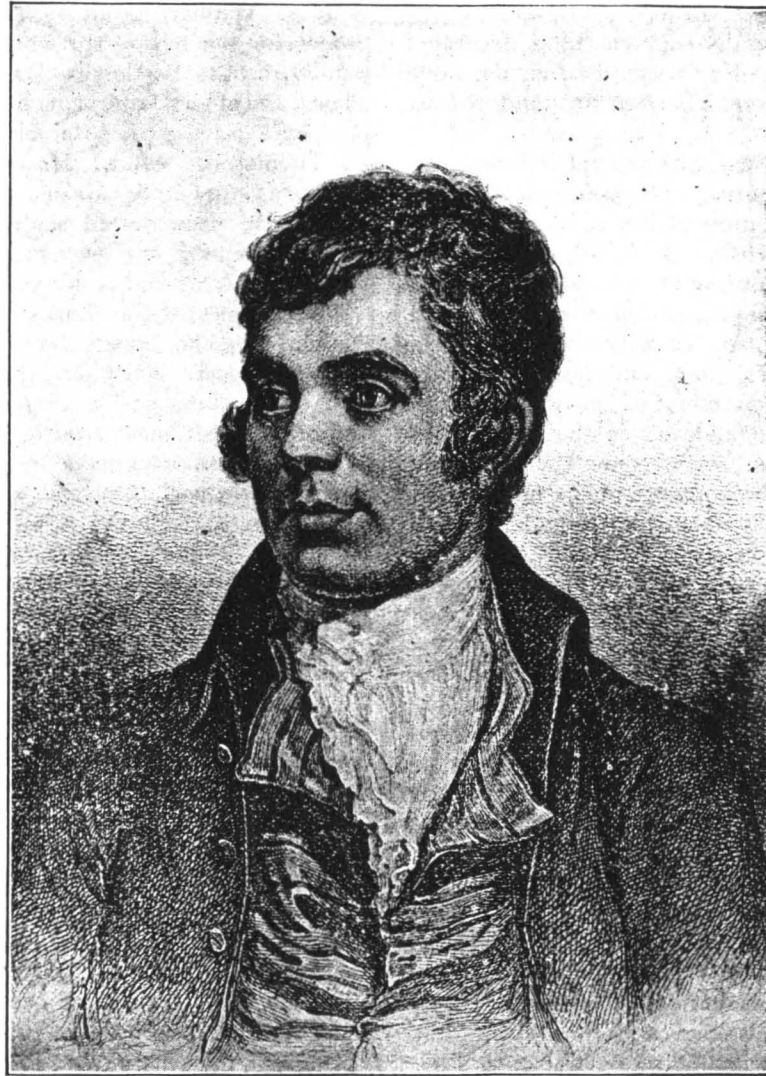
The prospects of France for the coming year, according to contracts now in view, for shipbuilding, railroads, and structural works give promise of a much larger demand for iron and steel in the near future.

The secret of all great undertakings is hard work and self-reliance. Given these two qualities and a residence in the United States of America, a young man has nothing else to ask for.

THE POET OF THE INDUSTRIAL CLASSES

By FANNIE EDGAR THOMAS

THE largest collection of Burns' works in the world to-day is in Washington. It is the property of Mr. William R. Smith, the horticulturist of the District of Columbia, who, a Scotchman, and one interests, morals, and independence of these "nature's noblemen," and in showing up the value of honest labor over that of inherited wealth, has been amongst the most telling of the noble influences of the world.



ROBERT BURNS

From an etching of Nicholson's, after Nasmyth, 1819

of the noblest types of the industrial class, claims that he owes all that he is worth to-day to the writings of the Scotch bard.

Burns' writings in their sympathy with the industrial classes know no parallels in literature. His influence in advancing the

His deep interest in that movement, coming at a time when it was not fashionable as it is to-day, gives him the additional credit of pioneer in the ranks.

Of the hundreds of people of all nations who visit Mr. Smith in his office in the

botanical gardens of Washington, in his capacity as a horticulturist of international renown, few are aware of the packed treasure which lies in the picturesque cottage, a few hundred yards away, buried in the noble old trees, and perfumed by flowering shrubs of the owner's own toil and cultivation of fifty years. The house is one library, the walls packed two deep with books on all sides, and in all corners, the spaces to ceiling's edge literally papered, hung, decorated with pictures of all sorts, treating the same subject, the bonnie bard of Scotland, Robert Burns.

The collection, which numbers some 520 editions of Burns, 4,000 volumes in all, in some way relating to Burns, as well as the latest specimens to be found, all of which involved thousands of dollars, represents a life of self-denying sacrifice on the part of this workingman, which stamps him as an idealist of first class and apostle of rare type in the direction of abstract nobility. His object, in addition to the pleasure of collecting, has been to show the world the growth and development of the influence of Burns' thought upon humanity.

Burns, by the way, runs next to Shakespeare in the popularity of his writings as expressed by reprints. The first American edition was published in Philadelphia; the second, printed in New York, was in the possession of George Washington, an ardent admirer of Burns, and is to-day owned by Mr. Cable, from whom it could not be purchased by the wealth of a Rockefeller. At the time Mr. Smith commenced his collection there were but 70 American editions listed. There are now some 130. The Smith museum contains also all but 20 numbers of the original 200 books of Burns' library, a valuable collection in itself, as showing the resource from whence the poet drew his inspiration, and for which after his death his family received £90, a large sum for that time.

The collection is divided into three features—the "inspiration" of the poet, his "product," and his "influence," the latter represented by writings of more or less value modeled after the original. They are all illustrated, not by "prints," but by engravings of the most careful and artistic workmanship of the day. They are bound

in all styles, values, and colors, the smallest in Scotch plaid and about as large as one's thumb, the largest the size of a family Bible. To the credit of Ireland be it said that she has turned out 60 editions of the Scotch poet's verse.

Two volumes beautifully bound, represent the musical settings of the Burns verses. Many of them, the ditties and ballads, as familiar to all as their writers; others for the settings of which by master hands, such as Beethoven, Haydn, Mozart, Pleyel, and others, large sums of money were paid by a man, a composer himself, named G. Thompson. All of Mr. Smith's own books, a large and valuable collection in itself, have been ousted shelf by shelf to make place for the ever-growing Burns family. And the end is not yet.

The pictures of this Burns souvenir collection, like the books, are of all sorts, sizes, and types. They are of the poet himself, of members of his immediate family, and of the great ones of earth, from his day to the present, who have been known to appreciate the poet at his true value. Burns' wife is there, the pretty "Jean," whom he so devotedly and so tenderly loved, and who, contrary to the records of many biographies, was a stone cutter's daughter, of position above the poet, and won after a sharp struggle with parents, who sought a more stable husband for their girl. There is also Robert, one of Burns' sons of a family of three sons and two daughters; also one of a grandchild of this same Robert, a lovely girl, Jean Armour Burns Brown, now living in Scotland, and who inherits all the best traditions of her gifted kinsman. In his cultivation of flowers and collection of souvenirs, Mr. Smith has had the fortune to discover this rare blossom also. He visits her at long intervals in her home, and now has adopted her.

Amongst the portraits of celebrities who have been Burns worshipers are those of Washington, of Lincoln, who reveled in thoughts of Burns; of William P. Frye, "one of our best Americans," who made a memorable speech on the subject; Longfellow, who wrote on the poet; Whittier, Holmes, Emerson, Bryant, Whitman, all worshipers at the shrine of poetic sincerity and beauty, which have made the

AUG 1904

Scotch poet immortal; Carlyle, also the "noblest Burnite of them all;" Lady Nairn, an imitator of the poet, who wrote "John Anderson, My Joe John;" Miss Gardner, who wrote the best and the most correct of the twenty-seven biographies published; Dean Stanley, and many others.

turesque cottage in the botanical gardens when in Washington, and the horticulturist-litterateur returns the calls at the Carnegie castle in Scotland. Mr. Carnegie's picture is one of the prominent ones in the collection at the left of "Burns' best," Lincoln being to the right. Mr. Carnegie's little



JEAN ARMOUR
Robert Burns' wife

Of our own day are Senator Hoar and Andrew Carnegie, a great friend of Mr. Smith, and sympathizer in the collection. In fact, the Scotch steel merchant has contributed almost 200 editions to the collection, and is constantly on the lookout for more. He is a welcome visitor at the pic-

daughter is also there. A special library for the reception of this Burns collection is to be built in Pittsburg by Mr. Carnegie.

Then there are busts, statues, bronzes, medallions, miniatures, engravings, and even comic sketches in this collection—a veritable picture gallery.

Mr. Smith is, naturally, jealous for the reputation of his idol. Mistakes and misrepresentations of biographies in this regard have helped to sadden the good man's life. Chief of these is the statement that Burns was a common "tooper." That he did take "his little drop now and again" is certain; also that he enjoyed society a bit overmuch. But the lapses were rare and harmless, and not at all in keeping with record. In these, too, he was led by the gentry of his day, whose habits were none of the best, and who loved the society of the clever and charming poet.

Another mistake is in regard to his birthday, which is occasionally stated to be the 29th of January, but which is in truth the 25th. That Burns was light in his estimate of religion is a libel, in the face of the deep-seated and earnest piety, and the advanced new thought in regard to it to be found in his poems. His "Prayer" is a creed in itself. Masonry owes much to Burns' poetry.

Burns was born in Ayr, Scotland. Most of his life, however, was spent in Dumfries, where he died. In a picturesque spot named "Mossgiel" he wrote his best work. He was but 37 years old when he died, July 27, 1796.

CARBON BRUSHES ON DYNAMOS.

It is surprising—at least to Mr. J. W. Burleigh—that the carbon brush is still used on dynamos, in spite of the increased knowledge of dynamo design. This practically necessitates large commutators and extra expense of brush gear, large shafts, and longer machines, and therefore must increase the cost of production by a large amount. Especially is this the case where large currents have to be dealt with. This practice results from the designer's doubt of the efficacy of metal brushes. Carbon brushes not only increase the first cost, but lower the efficiency, so that it frequently happens that this might be increased 2 or 3 per cent by the use of metal brushes. Consulting engineers demand carbon brushes, unmindful of the fact that so long as sparkless commutation is secured it is immaterial of what the brush be made. The author compares the design of a com-

mutator for a six-pole eighty-eight-kilowatt parallel-wound armature for carbon and for metal brushes. He finds that the use of carbon necessitates three times as many brushes as the metal. For the former, the commutator must be seventeen inches long, and for the latter only six. The watts lost, due to the friction of the carbon brush, number 1,025, as against 205 for metal. The watts lost, due to the resistance of contact of the former, are 1,260, as against 434, making the total loss 2,285 watts for carbon, and 639 for metal. The watts lost per square inch are 2.51 for carbon, and 2 for metal. The commercial efficiency with the carbon brush is 91.8 per cent; with metal, 93.4 per cent. The chief virtue of the carbon brush is its high specific resistance, which facilitates sparkless commutation. To secure a similar condition with metal brushes, they may be subdivided with an insulating partition between the portions; or the central layers of metal may have a higher specific resistance. Where a reversible motor is employed, a radial brush is necessary, but it should not be impossible to construct a satisfactory brush of this type out of metal. Mr. Burleigh then takes into consideration the effect of pole shape upon commutation. He shows that a radial division of the pole is not always satisfactory, though better results might be obtained were the slot carried entirely through the pole and yoke. He then calls attention to a type of pole suggested by himself some years ago, in which, by means of magnetic shunts passing out of the area influenced by the armature winding, the magnetic potential of the two tips may be made nearly the same.—*Electrical Review (London), June 10.*

Having had a taste for the last 25 years of the benefits of commercial prosperity, there is no disposition among the people of Mexico to return to revolution and contention.

The smallest coin in the world having a genuine circulation is probably the maltese "grain," a tiny fragment of bronze about as big around as the top of a slate pencil and having a value of only one-twelfth of a penny.

THE HUMAN ELECTRIC BRAIN

By SEARCHER

THE greatest study of man is "man;" and the deepest part of this study is the thinking apparatus of this most complex of God's creations. This subject has occupied attention since the first man began to reason; no doubt Adam pondered over it all alone in his Eden, before Eve came, bringing new food for thought and distraction that caused the downfall of her lord. And now, at this late day, this study of man is taking on something of a national character; the Smithsonian Institution has taken up the matter and is getting together a fine assortment of brains, human, animal and insect, with which comparative studies will be made. Structural forms, etc., will be scientifically investigated, brains weights will be compared, and different capacities determined as far as possible.

The tracing of man's ancestry back to the monkey—and father—has been done to the satisfaction of many believers in this theory; and when the Smithsonian Institution gets through with this problem many more of us may be drawn by ties of kinship to the zoo and to the four-legged cap-passer trained by the "prince" with de orga (?).

Yet, with human and other brains to work upon, and all scientific data on the subject at the fingers' ends, the explorers in the dominion of thought may never be able to fully reveal its secret, mysterious processes.

Job said: "When a man dies his thoughts perish." The thought action of the material man surely perishes when the body dies, and in some manner there is a structural change in the brain which obscures the minute detail of form and matter, so anxiously looked for with scalpel and microscope; the brain cells seal up their records of joy and sorrow, hope and fear, being actuated no longer from the center of impulse and life, and the doors of the halls of reason open no more forever.

However, by observing the outward manifestation of thought and taking this in connection with the nerve system, cells, etc., of the brain, various theories concerning thought processes have been formed. The beginning of these go back to, and beyond,

Aristotle, the Pythagoreans, Hippocrates or Plato. Descartes was the first to advance a consistent theory of brain functioning. Aristotle said the brain was the most inert and bloodless organ of the human body. Had he known of the blood tides that surge so swiftly through the human system his opinion would have been different.

Over thirty years ago Dr. Oliver Wendell Holmes, in a lecture on the human brain, set forth the idea that the thought process is essentially mechanical and works independent of our volition—though it can be modified more or less by conscious effort—and that our thoughts do not originate in consciousness, but come from a deeper, natural source, where lies the force which impels mental action. This hidden process, he said, belongs to the realm of physical forces and has its mechanical coefficient in a "molecular movement in the nervous centers," attended with waste of material constantly repaired by the great amount of blood sent to the brain. The idea that memory has its material brain record, that brain tissue bore the impress of thought in some peculiar form, was also advanced.

Of recent years the theory that the motive force in man's thought and body movement is electrical, has attracted considerable attention. We know that conscious motion is under brain control. We know the body contains electricity. The brain itself may perform its functions by the aid of this subtle power; the whole thought process may employ the electron as man uses the electric current to convey his thought from place to place.

The brain is both a receiving and a sending station; the outlying stations are touch, taste, smell, hearing, seeing. The body is ramified by the wires of transmission—the nerves—and every one of these conductors has connection with the great main (brain) station at the top of the system. Here are located millions of minute cells and a vast system of nerves which act as conductors of thought and sensation-wires that carry all kinds of impressions to be stored in the cell, the thought receptable.

Now for the electronic process. (The

electron is so minute that it takes about one thousand of these to span the diameter of an atom. The atom is the least particle of matter, so small as to be incapable of further division.) When a particular sense is aroused—say, by touch—the electric force at the point of contact flies in myriads of electrons up the nerve; swarms to the *medulla oblongata*, at the base of the brain; switches away in the direction unerringly indicated, and pours its thought message into the receiving cell. That will do for a theory. Now as to the storage of thought and impression in a brain cell. Is this done upon superimposed layers of films as thin or thinner than an electron? Or does the thought carrier itself preserve the record, and produce it when called upon. Is there in the cell an energizing fluid connected by nerves with each thought record, so that a particular thought or sensation is awakened when the senses or the inner consciousness appeal to the underlying chief source of action, the will?

Some time ago a writer described the condition of thought record as "hieroglyphics impressed upon the tissue of the brain," and "brain matter scarred by swarming thoughts." But no definition of these "hieroglyphics" was given, nor the manner of the "swarming" process.

Perhaps there is a sort of photographic record made, and this illuminated, flashed into consciousness (can we not "see" with the imagination?) by the subtle battery of the brain, obedient to the compelling will. There are certainly two kinds of brain records—those of sensation and those of vision. The latter, of course, concern the "photographic" process, and are retained in object picture of things seen, more or less clear, according to degree of mental impression.

The records of sensation, from hearing, smelling, tasting, and touching, perhaps are in a "condition" of the brain cell film or electrons. For instance, the memory of an old song "floats through the mind," because the films or electrons, perhaps, many years before, arranged and set down the music as it came over the electric nerves from the ear, something after the manner of the phonographic record. And action in the sound film or electron may set up a reflex

action to the hearing apparatus to aid in producing the memory sound.

The record of taste may be in taste itself (electronic or film) and the awakening of this cell-sensation come from a transmission of the electron from the organs of taste to the place of record. And so with the record of smell.

The theory (telepathy) of thought transference, of mental impression, near and distant, and of visions, has many advocates; and the Society of Psychical Research has records of a number of authenticated happenings in this psychological field.

Now, if we assume that such things occur, does not the human-electronic idea find a fitting place here? As wireless telegraphy sends a message so the supreme mental force may send an electronic message from mind to mind. If the wireless telegraphic instrument can find its mechanical affinity many miles away, the "electric mind" may work in the same manner of sending out its potent influence.

If electrons have to do with brain records, could not the latter be transmitted through an ether media to the receptive mind of a separate, distant person?

The "electric man" may not yet be fully discovered, but the time will surely come when this theory will be confirmed.

However, the pictures of life are certainly stored in the wonderful gallery of the human mind; some fade like an old photograph, as the years go on, and brain power grows weak; and some last until the human structure lays down its work for all time. And even then the great mind-mover, the power behind the throne of thought, is still triumphant. It is the imperishable.

Barney Mullen holds a commission and the government pays him a salary to free the War, State, and Navy Building and the White House of English sparrows. He was formerly a master-at-arms in the Navy.

The German Emperor has drawn an ornamental sketch, which is described as a "memorial sheet," to be presented, with the official announcement of death, to the relatives of those soldiers of the Southwest African Colony who have fallen, or will fall, in battle against the Hereros.

THE WORLD'S PROGRESS.

Methodism has 1,224 deaconesses.

The North German Lloyd has 51 steamers on 14 lines in East Asiatic waters.

Smuggling by motor car has been developed into a fine art in Switzerland.

During 1901—the last year for which the figures are complete—Germany lost 82 registered ships.

Contracts have been let by the Grand Trunk Railway for a new 360-foot ferry to be used at Toledo.

The Australian commonwealth government proposes to class consumptives among prohibited immigrants.

In the Brazilian State of Rio Grande do Sul about 400,000 cattle are annually slaughtered for jerked beef alone.

The Egyptian government has granted \$8,500,000 in aid of the construction of a line of railroad from Berber to Suakim.

Old Calabar, the headquarters of the Southern Nigeria government, has just been connected by telegraph with England.

Three per cent of the Japanese army officers are Christians. Two Japanese battleships are commanded by Christians.

The inhabitants of Mainz, Germany, are great readers. Of the 25,000 volumes in their library, 40,000 were used last year.

Mrs. Emily Edson Briggs, the woman correspondent "Olivia" of 40 years ago and a pioneer in the field, is still living in Washington.

The International Tramway and Lighting Company of Tientsin has been formed with a capital of \$1,206,000, and is located at Brussels.

Sir Gilbert Parker, the eminent novelist, has been a clergyman, professor in a deaf and dumb institute, deacon, editor, and playwright.

Mrs. Mary E. Hart, of Nome, Alaska's woman commissioner to the St. Louis Fair, is president of the most northerly woman's club in the world.

E. Phillips Oppenheim, the popular English novelist, is visiting this country. He is not a stranger here, as he married a Boston girl several years ago.

It is reported that Senator Bailey, of Texas, is interested in the string of runners which is being raced by Will Young.

The Swiss government has passed a law prohibiting parents afflicting their offspring with fantastic and absurd Christian names.

Alcoholism is extremely rare in the Italian army. In 1901, the latest for which figures are available, only 25 cases were admitted to the hospitals.

Charles H. Booth, lately deceased at Englewood, N. J., was 101 years of age and holder of the oldest life insurance policy of which there is record.

The United States Senate will have among its members at the next session five former Cabinet officers—Senators Knox, Teller, Alger, Proctor, and Elkins.

Of the four great lumber districts of the United States, the Southern pine region stands first. In it are 3 per cent of the saw-mills and half the lumbermen.

By the telecryptograph, the invention of M. Malcotti, an Italian engineer, resident in Brussels, conversations held over telephones are to be reproduced in print.

Premier Watson, the Australian labor leader, who was called upon to organize a ministry, has formed a cabinet in which all but one are members of the labor party.

The city of New York in the 12 months ending with February, for the first time in its history, passed the billion mark in the number of 5-cent fares paid to local transit companies.

General Angel Martinez, who died in Colima, Mexico, recently, leaving no family, bequeathed his entire fortune, amounting to more than \$2,000,000, to the governor of Colima.

The Tien Tsu Hui, or Society for Natural Feet, is making many converts in China. In some regions young men sign a pledge not to marry girls with artificially-crippled feet.

Notwithstanding the most careful search, the causes of a number of transmissible diseases, both human and animal, still remain unknown. Of the human diseases belonging to this group may be mentioned especially scarlet fever, chickenpox, typhus fever, and hydrophobia.

Paraguay is constantly making progress in its trade, and the prospects are the amount of its general trade movement will continue on the increase.

A married couple of Lienz, Austria, celebrated their silver wedding by filing a petition for divorce on the ground of "unconquerable mutual antipathy."

It is noted in New York City that the increase in the passenger-carrying traffic takes place on the elevated roads, that on the surface lines remaining at a stationary point.

All the local authorities in the County of Cork, Ireland, have united to establish a sanitarium for consumptives on the banks of the Lee, several miles above the city of Cork.

Henry Rosenberg, of Galveston, Texas, bequeathed funds for the erection of a library to be used for negroes exclusively. This is said to be the first instance of the kind in the South.

The Indians camping in tepees on the grounds surrounding the Indian Building at the World's Fair number more than 200 and represent many different tribes, some of them almost extinct.

Man's structure, compared with that of other animals, indicates that fruits and esculent vegetables are his natural food. The man-like apes live exclusively upon fruits, nuts, and green leaves.

A school of English has been instituted for the Philippine scouts on the reservation at the World's Fair. Captain John C. Granville is in charge. The school is providing much interest to visitors.

Prof. Albert Smyth is now in England and will later proceed to France on a search for hitherto unpublished correspondence to use in his new edition of Benjamin Franklin's works. The work will be brought out in 1906, the two hundredth anniversary of Franklin's birthday.

During the first four months of 1904 the imports of materials into France necessary to industry were \$6,272,500 less than for the same period in 1903, while alimentary products show an increase of \$221,950, as compared with the same classes of imports during the first four months of 1903.

An effort is being made to have the candidates for the cavalry branch of the service selected by reason of their special fitness, and not by personal selection.

The Bakers and Confectioners' International Union issued its first charter to a local union of the craft in Porto Rico recently. The local begins with 72 members.

Oscar Maimras, United States consul at Colon, was appointed by President Lincoln the day before he was assassinated, and has been continually in the service ever since.

The switchboard of the electrical plant represents a great deal of money, and it is said that these represent an investment of \$20,000,000 in the case of one company alone.

Senator Chauncey M. Depew is credited with the statement that "a man who has acquired his business qualifications in a railroad office will make a success anywhere."

Japanese system of letters is called Iroha, from the names of the first three letters, "i," "ro," and "ha," on precisely the same principle as that which gives to our own system the title "alphabet."

Sir Edward Clarke, K. C., is said to be the best paid professional man in England. His earnings at law are about \$217 an hour. If he works 10 hours a day 300 days in a year his income is \$651,000 a year.

The sight is said to have been remarkable when, at Ashby, England, the other day 10,000 homing pigeons were liberated en masse. They had been brought to the spot by railway on a special train.

Pasteboard made of 40 per cent peat fiber and 60 per cent wood shavings is a standard product both in Germany and Sweden, being stronger, lighter, and cheaper than pasteboard made in the ordinary way.

There are now about 2,000 motor vehicles in use in Scotland. At the beginning of 1902 there were only 250. A man who made a tour of the country on a motor car in 1900 had stones or vegetables thrown at him by men or boys nearly every day; but since the speed was regulated by law to 20 miles an hour in the country and 12 in cities the opposition has gradually died out.

Captain Charles Hunt, of El Paso, Texas, has closed a deal involving the shipment of 160,000 head of sheep to South Africa.

Dr. C. L. Marlatt, first assistant entomologist to the Department of Agriculture, has begun an investigation of the moth pest in the Bay State.

Lieutenant-Colonel James Worden Pope, deputy quartermaster general, is to be transferred from Denver to Philadelphia, to be commander of the Quartermaster's Department in that city.

Edward F. Searles, of Methuen, Mass., is erecting a large fireproof school building for that town, which, with its furnishings, is expected to cost \$500,000. It is intended as a present to the town.

Mrs. Mary A. Cunningham, who recently died in Milton, Mass., left \$600,000 to the town to provide parks, hospitals or whatever other institutions may be needed for the benefit of the citizens.

A new defense was sprung lately in an English criminal trial. It was pleaded on behalf of the defendant that he had once received an electrical shock of 2,000 volts, and that it had impaired his mind.

Owing to great losses of cattle by the rinderpest in Egypt, the large plantations and farmers there are about to introduce steam plows and automobile machines for the cultivation of grain and cotton.

Japanese generals receive \$67 a month, the superior officers \$40 and the subalterns \$27. The privates have 8 cents a day. A Russian lieutenant gets about \$200 a year, a captain about \$300, and a major \$450.

Frontera, Mexico, is to have a million-dollar plant for building steel, iron, and wooden vessels for river and ocean navigation. A complete outfit of machinery and tools has been ordered from the United States.

A "Battle-ax Windmill" is a curious feature of the landscape in the once arid plains of the Far West. It is of rude construction, made by ranchmen or sheep herders, and the wings consist of square pieces of tin attached to wooden arms. It is the appearance of these that gives the improvised windmill its name. One of these contrivances will figure in a World's Fair exhibit.

Adam Harvey, of Kokomo, Ind., is believed to be the oldest working blacksmith in the United States. Hale and vigorous at 86, he has been toiling at the anvil every week-day until temporarily laid up last month.

An ingeniously constructed shadow clock has just been invented by Prof. Herth, of Lynn, Mass. The essential feature of the invention consists of a lamp, which throws upon the ceiling an optical representation of a small watch.

It is reported that J. Pierpont Morgan, of New York, will in the near future erect at Winchester, Va., a monument over the grave of General Daniel Morgan, of Revolutionary War fame. The grave is in Hebron Cemetery.

The most striking improvement in cement manufacture is the rotary-kiln method of calcination, which practically dispenses with manual labor. The idea originated in England, but Americans worked out and perfected the rotary kiln.

Baron Suyematsu, in an address before the Japan Society in London the other night, said that one of the easiest ways of becoming a Japanese subject was to marry a Japanese woman. Then the husband became a Japanese subject.

Clement Doane, the oldest editor in active service in the State of Indiana, died recently at Evansville. For 47 years he was editor and publisher of the *Jasper Courier*. He was known to his friends as "the Nestor of Southern Indiana journalism."

Justice Wills, of Great Britain, is said to contemplate retirement. On one occasion, after giving a decision as an arbitrator, he came to the conclusion that his award was unjust, and straightway sent to the defeated litigant a check for the amount in dispute.

The people of Germany will have an opportunity to see for themselves how Prince Hohenlohe, of that country, and his suite enjoyed themselves on the occasion of their recent visit to the State of Colorado. Motion pictures of the distinguished visitors were made while they were in the Cripple Creek district, and these pictures are to be sent to Germany as well as exhibited all over the United States.

Dr. Wiley, the government chemist, says that after a story was published which stated that the Washington "poison squad" had beautiful pink cheeks after eating certain food he received thousands of letters from women all over the world begging for the recipe.

Compared with the agricultural area and population of Siberia, the use of agricultural machinery is very small. The total output for such machinery in Russia is 28 times less than in the United States. Of course, the figures for Siberia proper are much smaller.

The highest speed which can be attained in an "express" elevator, in a very high office building, is about 700 feet a minute. That is equivalent to a mile in more than seven minutes, and many a pedestrian has walked for considerable distances at nearly as fast a pace.

The Dowager Duchess of Abercorn, who has just celebrated the ninety-second anniversary of her birth, is one of the most marvelous old ladies in the world. At the present time her children, grandchildren, great-grandchildren, and great-great-grandchildren number even 150.

An English watchmaker has just finished making a tiny watch in the form of a shirt stud. Its dial is two-sixteenths of an inch in diameter, and it is to be worn with two other studs. By turning the upper stud the watch is wound, while by turning the lower one the hands are adjusted.

The International Typographical Union will build a library at the Printers' Home, at Colorado Springs, Col., to accommodate the large list of books presented to the home by the late Congressman Amos J. Cummings. The library presented to the institution by Mr. Cummings aggregates 20,000 volumes.

Importers of consigned goods exported to Canada will in future be required to produce, in addition to the true invoices, contracts of sales, installation and delivery. Such invoices must include the actual price paid for the goods, cartons, coverings, cases, and all expenses incident to placing the goods in condition ready for shipment. No discount other than such as has been actually allowed must be shown.

Of the diamond polishers in Amsterdam 90 per cent are of the Hebrew faith. They look on this occupation as one on which they have a traditional claim. The work is so hard on the eyes that few can keep at the finer grade after their fortieth year; thereafter they expect their children to support them.

The Northern belt of forests is, perhaps, greater in extent than all the other timber belts and reserves of Canada combined. It extends from the eastern part of Labrador north of the fiftieth parallel in a north-westerly direction to Alaska, a distance of some 3,000 miles, with an average width of perhaps 500 miles.

Mr. L. O. Blair, of Quincy, Ill., has a wine pot which he believes to be 557 years old. It is dated 1347, he says, and has the following inscription stamped on it: "Th. Ct. Sack." It is Mr. Blair's firm conviction that this ancient wine pot should be exhibited at the World's Fair. He offers it for this purpose.

According to a bulletin issued by the Chamber of Commerce of Cadiz, the production of cork in Spain is estimated at 28,450,716 pounds; that of Portugal at 32,515,104 pounds; Algeria and other cork-producing countries together about 20,321,940 pounds—making the world's total annual cork production 81,287,760 pounds.

If Oklahoma and Indian Territories are admitted to the Union as one State, as has been proposed, it is probable that the first Senator will be Quannah Parker, an Indian.

The report of the Minister of Railways gives the length of the railways in Canada on June 30, 1903, as 19,836 miles. Of this 19,077 miles were operated by steam and 759 by electricity.

Compared with wages in the United States those received by the wage-earners of Venetia seem small; an artisan gets from 60 to 80 cents a day. By practicing economy a family, if the members are not too numerous, can live on this amount, the principal articles of sustenance being "polenta" (a sort of solid porridge or hasty pudding made of maize, or Indian corn), potatoes, beans, and bread. Wine is the beverage of all the people.

According to Chinese customs returns the empire's trade in 1903, imports and exports, amounted to \$346,298,624. The trade of 1894 amounted to \$185,732,480. Each year since 1894, except 1900-1901, shows a steady gain. In those years there was a considerable falling off. The increase in 1902 and 1903 only partly made up for the difference.

Emperor Willaim of Germany certainly shows versatility in his designing. At the recent wedding of the daughter of the British Ambassador in Berlin he presented the bride with a porcelain table clock made from a model that he had designed. Another porcelain gift from the royal family was a flower bowl sent by the Crown Prince of Germany.

Asphalt continues to be the most valuable mineral of Trinidad. The value of the exports has increased from \$527,000 in 1895 to \$810,000 in 1903. Up to last year this industry had suffered to some extent from long and costly litigations, but a special commission of inquiry has recently made recommendations which it is hoped will prevent litigation in future.

From the annual report of the minister of mines of British Columbia for 1903, just issued, it appears that the total production of the mines of the province show a very slight increase over the year previous, being of the value of \$17,495,954, compared with \$17,486,550 in 1902. Excepting copper and coke, which show an increase, there is a falling off in all other products.

A discovery that is expected to prove of great interest has just been made by M. Hugues Le Roux, who is on a mission to Abyssinia. He has found the original manuscript, containing in the ancient language of the country, a contemporary account of the visit of the Queen of Sheba to King Solomon, from the union of whom the Abyssinian monarchs claim to be descended.

The Japanese Emperor is very methodical and lives in the plainest possible style. His greatest pleasure is study, and he devotes many hours of the day to it. Every morning before attending the court he takes instruction in oriental classical literature, and also gives audiences to his tutors in Western politics and diplomacy. In the after-

noon he ardently studies the fine arts and poetry. He has himself composed one or two poems.

A quarrel has developed between Scottish and the Midland steelmakers which threatens novel results. The Scottish producers are sending steel into the Midlands and selling it at cut prices, besides paying the freight from Scotland. The Midland manufacturers at a recent meeting decided to notify the Scottish firms that if their "dumping" was not immediately stopped they would proceed to "dump" their own products in Scotland.

IN CASE OF FIRE.

First of all, sound the alarm.

Close the door and open the windows. A closed door is a wonderful protection against flame, and an open window lets out the heat and the smoke.

Do not fear thick smoke too much. A stairway that is a mass of smoke is not necessarily impassable. Go down on your hands and knees—you will find no smoke near the floor. Try to descend the stairway in this way, and in nine cases out of ten you will descend in safety. Many have been burned to death because they thought a smoke-filled stairway meant an impassable one, and because they did not know that there is always plenty of pure air to breathe down near the floor.

If there is a skylight, break it open. The smoke, then, will disappear through the opening rapidly.

Should the fire have gained such headway that all exits are blocked, shut yourself in a front room and lean far out of the window, so that the firemen may see you. Once they see you, it is reasonably certain that they will rescue you.

Above all things, keep cool. The majority of deaths from fire would have been averted if the victims had not lost their heads.

If there are any extinguishers or hand grenades in the house, do not hesitate to waste a few charges or a few grenades in fire drills. Many a fire has resulted disastrously because no one, when the time came, knew how to use the extinguishing appliances.—*New York Tribune*.

P. E. SMITH, E. E.

By CHAS. H. HARRISON

I AM going to tell you the story just the way I heard it, and the people who told it to me will have to stand the consequences if it is incorrect. For my part, I believe that the story is true, for I am personally acquainted with the party who was directly interested. The story reads something like this:

In the State of Minnesota and on the branch line of the Great Northern, which runs directly from Minneapolis to Fargo, there is a little town called W———. It was an enterprising burg, and the thought uppermost in the minds of its citizens was the making of W——— one of the greatest and most populous cities in the Northwest. New improvements were continually planned and many of them were put into execution, all of which tended to increase the value of the town and adjacent property, and which also served to give W——— the reputation of being the most up-to-date town in that section of the country.

A surprise was in store for the citizens who were to meet on the following Monday in what they called the W——— Improvement Club. The surprise was the proposed installation of an electric railroad, which would run from the station around the town and thence into the fertile country around.

The proposition was received with enthusiasm. Enough capital was pledged at the meeting to insure it going through. The entire matter was placed in the hands of a committee of the club to go ahead and make out the estimate and secure the advice of a competent engineer as to cost and the other matters which would bear upon the road.

The committee immediately set to work. Before going into details a letter was addressed to Mr. P. E. Smith, E. E., Chicago, who was well known throughout the Middle West as a man being experienced in his line of business, and who had built many railroads and installed many electric plants. Thus far all right, and now comes the principal part of the story.

Sometimes the United States mail, despite the thoroughness of organization and dis-

cipline, makes mistakes. It did so on this occasion. The letter was delivered to P. E. Smith, but not the P. E. Smith that the committee up in W——— had directed it to. It was delivered to an electrical engineer, but not to the one it was supposed to have been delivered to. It was brought up to the headquarters of Local Union No. 9 in Chicago, for that is the only place that the mail carrier thought that electrical engineers could be found.

When Mr. P. E. Smith, lineman and electrical engineer, if you please, called up at headquarters that evening after his arrival from a dusty ride from some place in Indiana, where he had been to look after the interests in some light or other plant, he found this missive waiting for him. Of course, he was surprised himself to receive it, but no one else knew it. He treated it as common every day business, and showed with a slight degree of importance his letter to several of the members of the local, and even went so far as to engage a few "gainers" for the job.

But Smith was puzzled. He didn't know whether to regard it as a joke or take it seriously. The more he thought the more he was convinced of its genuineness. It never occurred to him that the letter was not his own, and that there was another Smith in Chicago. Before morning he had decided upon what to do. A telegram was addressed to the chairman of the committee and sent off immediately. Now, it was just an accident that Mr. P. E. Smith did not have the necessary amount of capital to ride to W——— on the cushions, but that made no difference.

That same evening Mr. Percy Edison Smith, E. E., left on the C., M. & St. P. for Minneapolis, where he arrived shortly after the same train. At the latter point he stopped over night, and in the morning early groomed himself nicely, and with the few remaining cents he had purchased a ticket to W———. Arriving there he was met by a committee of citizens, who escorted him around the city and then finally to a banquet in the swellest hotel.

P. E. Smith carried out his part to perfection. He was slow and deliberate in his

conversation, watching every word, and when he saw a chance wedged in *technic electric*, which made the citizens regard him as a man of great intelligence, of much dignity, and at the top in his profession. That night he was tendered a reception by the ladies of W——, many of whom found him to be a charming and delightful person.

The next day actual work was commenced in making the estimate. And Smith was just the one not to let this fail him. However, it is needless to go further. Not a break was made. The material was ordered and the construction of the road actually commenced. All the linemen and others, who knew Percy, were warned not to mention anything other than friendly greetings. This was carried out all right, but it caused the eminent engineer lots of worry. The work had progressed too far, too, and was going in such an excellent shape to have it spoiled by this time.

The days dragged along, and at last the road was finished. The citizens of the enterprising little city had looked forward to this as a gala day. The day was declared a holiday, and the brass band was called out at the little park near the depot, where a platform had been erected, and speech making took up the entire afternoon. Of course, the engineer who constructed the road was one of the principal speakers, and his good luck stayed with him, and not a break was made. In fact, he was regarded in the little city as a wonderful man to have built such a big road in such a short time.

That night a big banquet was given by the Improvement Club. As usual Smith was one of the principal speakers. Percy had a hard time controlling the amount of champagne, but he passed the ordeal like a martyr. Next day he had his picture in the paper and an article on the construction of electric railways.

A few days later Smith left town, after settling with the city and securing his fees, which were very large, but the citizens had secured a good road, and were satisfied perfectly. But up to this day none have ever known that the W—— Traction Company was built and the first cars operated by a lineman, member of the I. B.

E. W., and that now this same lineman signs himself P. Edison Smith, E. E.

QUIET AT TOLEDO.

No. 245 is still in existence with a few staunch brothers. Work around this place, is very slack, and nothing in sight; brothers with paid up cards are walking the street. I would advise brothers that are traveling to leave us off their route at present, but if any brother comes this way he will not go hungry. Brother Allman paid us a call, but could not stay with us. He said he would be with us more in the future. We wish to inform the brothers that we have lost our friend and a friend of the poor, the Hon. S. M. Jones, our mayor. He was a friend of the laboring class.

R. MILLER.

Toledo, Ohio, July 16, 1904.

FROM FAR OFF HAWAII.

We are doing some reform work in No. 111, which we hope will prove permanent. It is rather a hard matter to keep a local going on this dot in the Pacific, as the brothers, as a general rule, do not stay long, but No. 111 is fortunate in having a few old stand-bys, who have kept things moving under a great many difficulties.

Work here remains about the same. Once in a great while we have a spurt, which is more than we can handle for a short time. We don't advise brothers to come to the islands expecting to find work, for there is very little here.

Honolulu is about the only place on the islands that amounts to anything, and there are probably ten wiremen and fifteen linemen in the city, and they are not all working. Line work is done mostly by the natives. There are a few positions on the plantations, but generally there are several after one job.

Brothers expecting to come to the islands had better buy round-trip tickets, as it is rather a hard place to get away from. I hope before the next letter reaches THE WORKER we will be able to say that No. 111 has been greatly benefited by its new officers-elect.

W. F. DUNN.

Honolulu, July 12, 1904.

ELECTRIC SPARKLETS.

A British patent was issued recently to Prof. Reginald A. Fessenden, which relates to improvements in wave telegraphy.

Improvements by the Brooklyn Rapid Transit Company to cost \$10,000,000 are to be made, including fire-proofing its cars.

Business men of Booneville, Miss., have organized a telephone company, and been granted a franchise to construct an independent system.

Invitations to send delegates to the International Electrical Congress at St. Louis were sent to thirty national electrical and scientific associations all over the world.

A number of Asheville (N. C.) firms have dismantled their steam plants, installed motors, and are now using electric power, which means a great deal for the cleanliness and healthfulness of that city.

The Exposition Electricity Club, embracing all electricians connected with the St. Louis Exposition, has been formed with Frank H. Gale, of Schenectady, N. Y., as president.

Mr. Cooper Hewitt, who is perfecting his new light, is to have an experimental electrical laboratory 210 feet up in the tower of Madison Square Garden, New York, which is to be remodeled for him at a cost of \$10,000.

The New York State Independent Telephone Association has adopted a resolution that its members shall respect the territorial rights of all accredited Independent telephone companies and that there shall be no encroachment.

The conditions during the past eight months in Trinidad, Col., caused by the coal strike, have induced the coal companies to make some changes, among them the addition of electrical motors inside the mines and also of electrical diggers.

Business men from Port Arthur, Ont., have visited the towns bordering on the north shore of Lake Superior for the purpose of establishing a telephone system between Port Arthur and Duluth, Minn. The line will be 196 miles long. The company will be incorporated under the laws of Minnesota.

Eight hundred motor equipments have been ordered from the General Electric Company for use on the cars to be employed on the Tokyo Street Railway Company's 40 odd mile electric traction system now under construction at Tokyo, Japan.

The General Electric Company has received a contract for about \$1,000,000 worth of supplies for the Ontario and Niagara Falls Power Company, which will operate 45,000 kw. of generating apparatus on the Canadian side of the Falls.

A dispatch from Colorado Springs, Col., says that Nikola Tesla has abandoned his wireless telegraph station which he established there in 1898. The instruments will be shipped to New York. The station stood at an altitude of seven thousand feet, facing Pike's Peak.

It is stated that the British postoffice telegraph department has under consideration the question of substituting female for male operators for working the telephone service at night when the time comes for the department to take over the National Company's undertaking.

A novel telephone system is in successful operation between Wausaukee, Wis., and some of its neighboring towns, the top strand of a barbed wire fence along the right of way of the Milwaukee road being used. About 70 telephones have been installed in homes of farmers, and other patrons are being secured.

The growth of the independent telephone business in Ohio has been very rapid. The movement only took shape in 1900, and to-day in Miami County alone there are over 4,100 independent 'phones in use located as follows: Piqua, 1,500; Troy, 1,400; Covington, 400; Pleasant Hill, 200; West Milton, 600. Other counties report a similar growth.

In the matter of the charges of Thomas A. Edison against two examiners in the Patent Office, the Secretary of the Interior has decided against Mr. Edison. The findings of Acting Commissioner Moore were that there was no evidence of malfeasance or intentional wrongdoing on the part of the examiners, and that the charges were not sustained and should be dismissed.

The Illinois Central is to expend \$500,000 in reorganizing and improving its system. Wires weighing 400 pounds to the mile will be substituted for those of 175 pounds, now in use. This, with improved instruments, it is hoped, will make conversation between Chicago and the Gulf as easy as talking across a small room. The telephone system is also to be extended over the Omaha division.

It is announced in Berlin, Germany, that the firm of Siemens & Halske has projected plans for the construction of a high-speed electric railway from Berlin to Hamburg, a distance of 180 miles. The cost of construction is stated to be £3,500,000 for a single line and £5,200,000 for a double line, guaranteeing a speed of 100 miles per hour.

At the thirty-eighth annual convention of the Master Car Builders' Association, held in Saratoga, N. Y., Mr. H. H. Vreeland, president of the Metropolitan Street Railway Company of New York, spoke of the advance made by electricity, which he believed would eventually supersede steam for railway motive power. He urged the master car builders to meet the demands soon to be made upon them.

It is reported by the Cincinnati daily papers that the Cincinnati and Suburban Bell Telephone Company has arranged with the local weather bureau to receive the weather forecast on all weekdays. This will be sent promptly to all the neighboring exchanges, and any subscriber, by calling up his exchange, can obtain the report. It is anticipated that this service will be appreciated by the farmers, and that they will benefit thereby.

Plans are being prepared for a new traction line that will connect Pittsburg and Canonsburg. The line will start from Carnegie, and first run to McDonald, passing through a well-populated mining section, and then turn south to Canonsburg, the total distance being about eighteen miles. At Carnegie the line will connect with the Pittsburg Railways system, and from Canonsburg the plan is to ultimately carry the line to Washington, or else form some agreement with the new road that now operates between these two points.

The directors of the New Orleans Railways Company have appropriated \$1,500,000 for improvements to the conduit system, the building of a power station, the construction of a lighting gas holder at the gas works, and other improvements. The power station is to augment the equipment that is now located on the river front at the foot of Market street, New Orleans, and when completed will be the largest power house in the South.

A trolley line has been projected from Atlanta, Ga., to Anderson, S. C., and the proposed route is now being surveyed. The line will be 140 miles long, and will connect at Anderson with the trolley line from Greenville, making the whole line 165 miles in length. The line, as now proposed, will extend from Atlanta to or near Stone Mountain, Lawrenceville, Hoschton, Jefferson, Commerce, and Carbesville, in Georgia, and thence to Anderson.

A movement is under way for the construction of an electric line across the southern end of Wilkinson County, Mississippi, from Fort Adams on the river to Centerville on the Mississippi Valley road, via Woodville. The promoters of the scheme are now at work raising subscriptions to the stock of the enterprise, and assurances have been received from Eastern capitalists that as soon as sufficient stock is taken by local subscribers to guarantee local interest and protection, the balance of the money will be forthcoming to build and equip the road.

As soon as the necessary improvements can be made the people of Evanston and the north shore will have an electric street car service connecting with the Northwestern elevated road at Wilson avenue, Chicago, and extending around the downtown loop. This has been assured by a long-term agreement which has been reached between the Northwestern elevated and the St. Paul Railroad, whereby the former secures the operation of the latter's suburban line between Wilson avenue and Evanston. The elevated company agrees to electrify the line, which will cost in the neighborhood of \$800,000 or \$1,000,000 for the six miles between Wilson avenue and Evanston.

A. M. Taylor, of Penn Yan, lately explained before the New York State Independent Telephone Association at Buffalo how his company gained the patronage of farmers by keeping a blackboard in each exchange, upon which a list of cattle, live stock, hay, chickens, and similar truck for sale and wanted was posted. Whenever a farmer wanted a shoat, all he had to do was to call up central and be connected with the man who had shoats for sale. If there was none on the list, his name and number were chalked down until there was activity in the shoat market.

The formation of a syndicate for the purpose of constructing a system of electric railways in and about Parral, state of Chihuahua, Mexico, is progressing satisfactorily. This syndicate proposes to build and operate, in addition to the railway, a system of telephones in the state of Chihuahua. This system will connect the principal mining camps and the agricultural and cattle regions with the capital of the state. An electrical power plant and electric tramway system will be constructed at the Barranca del Oro mines, situated at Ixtlan, territory of Tepic, Mexico.

The manager of some works on the Baltic has received a message reporting progress in the repairs to one of the Russian ironclads from his company's branch establishment at Port Arthur, which is said to have been sent by wireless telegraphy via Chefoo. Although there is no evidence at present that the Russian authorities in the East have received messages by such means, says the *Electrical Engineer*, London, an interesting point of international law may arise out of the question of wireless communication. Some of the authorities who are examining the question are inclined to hold that if a blockaded port is in wireless communication with the shore station on neutral territory, this does not necessarily constitute a breach of neutrality on the part of the country in whose territory the receiving station is situated, any more than would communication over an unsevered cable, the contention being that the enemy has a remedy by stationing a vessel between the dispatching and receiving station fitted up with the necessary

apparatus for interfering with wireless messages.

It is announced that a contract has been signed by the United States government, at Washington, with the De Forest Wireless Telegraph Company, providing for an extensive wireless service. The terms of the contract give the government the right to make full use of the De Forest system, and the government pays for the installation of stations and equipment. The company reserves the right to send all private and commercial messages over these lines. The contract accomplishes the plan of wireless communication from New England to Panama, and it is expected, will make it possible to communicate, within a short time, from New York to the Orient. Stations will be erected connecting the naval bases in Key West, Fla., Guantanamo and Culebra, Cuba, and Panama. A station will be placed in lower California, to connect with San Francisco, which will connect with Seattle. One of the largest stations is being operated at Dutch Harbor, in the Aleutian Islands, and this will be placed in communication with a station at Kamchatka, Japan. The contract was entered into by Rear Admiral Manney, chief of the Naval Bureau of Equipment, and Abraham White, president of the American De Forest Wireless Telegraph Company. The company is to supply to the government the wireless instruments, and guarantees to maintain reliable service on the following circuits: Key West to Panama, 1,000 miles; Porto Rico to Key West, 1,000 miles; South Cuban coast to Panama, 720 miles; Pensacola to Key West, 450 miles; South Cuba to Porto Rico, 600 miles.

A LOADED TELEPHONE TRANSMITTER.

There is to-day a wiser telephone subscriber in the neighborhood of Getaway, W. Va., if one may credit the story told by a local newspaper. Finding some difficulty with his telephone, this self-appointed repair man undertook to put it in order, but not with entire success, for upon taking apart the transmitter, the granulated carbon was spilled upon the floor and some lost. An examination of what was left

convinced the would-be expert that the grains were nothing more than gunpowder. Consequently, when putting the instrument together again, he used gunpowder to replace the lost material. After finishing the job to his satisfaction, he attempted to call up the exchange, so that he might ascertain how successful his work had been, not thinking that now his transmitter was loaded; but, upon ringing the magneto, the gunpowder in the transmitter exploded, with some damage to the subscriber's face, and disastrous effects upon the telephone. A moral and a caution may be drawn from this little incident. Do not meddle with your electrical appliances unless you happen to know something about each particular device. A dynamo tender is apt to make as poor a repair job of a telephone as the farmer referred to above. And do not take too literally the words used by the electrical fraternity. A loaded telephone line is not loaded with gunpowder.—*Electrical Review.*

COUNTING THE COST.

We, as a joint committee of Locals No. 68 and No. 121, appointed to investigate the warning of Brother Brennan, of No. 44, Rochester, N. Y., find that his letter, as far as it goes, is very fair, but going into details, we find the following to be the financial conditions of affairs:

As the constitution provides that 16 2-3 per cent only of the entire per capita shall be held inviolate for convention purposes and not the total receipts, as he has figured, after taking the first six months since the constitution went into effect we find that the total per capita paid in is \$33,120.50; deducting 16 2-3 per cent of this, which is allowed for convention fund, we have left \$5,520.09 at the end of the first six months, averaging \$920 per month.

From December 1, 1903, to September 1, 1905, will be 21 months, making a total for convention fund of \$19,320; allowing a liberal increase in convention fund, say 20 per cent, would make the total convention fund \$23,184, instead of \$44,600, as figured by Brother Brennan.

Taking his statement as to the approximate representation to the next interna-

tional convention, say 475 delegates, makes the cost of the convention \$59,375; as we figure according to the per cent set aside by the constitution for convention fund, we find there would be a deficit of \$36,191.

Another item of great expense is salary and continual expense of the seven Grand Vice-Presidents. In looking over the treasurer's report for the past six months, starting December 1, 1903, we find expenses and salaries of seven Grand Vice-Presidents reached the sum of \$9,009.25, an average of \$1,501.54 per month. Now, taking the 21 months, as stated above, this item would reach the sum of \$31,532.34.

We find that thirty-five charters have been granted through the efforts of these organizers, cost \$9,009.25, or \$257.40 each, with an increase in membership of 385. Now, brothers, do you think the result justifies this enormous expense? Do you not think it would be much better to eliminate this expenditure by returning to the old regime existing before the new constitution went into effect? We do not, understand, question the earnest efforts of our Grand Vice-Presidents, but the results do not meet with the anticipations of the delegates to our last convention, when they claimed a membership of 100,000 would be attained in two years.

Brothers, we have gone into this problem very seriously and conscientiously, giving same much careful thought and attention, and we respectfully request that you do likewise. We believe that if the proposition of the Grand Vice-Presidents on salary and expense is again brought before the membership of the Brotherhood, their decision would be overwhelmingly against the present system.

Brothers, we would like to see this proposition of the finances of our Brotherhood thoroughly considered and think it exceedingly advisable that each brother or local take the same under advisement, and so recommend.

J. H. SHAW, No. 121,
B. F. ENOS, No. 68,
G. G. MACY, No. 68,
J. E. VOORHEES, No. 121,
D. REED, No. 121,

Joint Committee.

THE LESSON OF CONCENTRATION.

It was a black, red-bellied mud turtle that taught me the great lesson of concentration. I didn't call it that when I learned the lesson, but that will do to describe it.

I went swimming one hot August afternoon, down at the old swimming hole. On the old yellow stone that stuck up at one corner of the pool, I saw a small mud turtle, about the size of a silver half-dollar, lying in the sun. I crept up and caught him.

I took my prize home and mother gave me a big tin washbasin to keep him in. I filled the basin about a quarter full of water, and put some stones in the middle, on which the turtle could climb up and bask when he got tired of swimming about in the water. Then I caught some flies, and threw them, so crippled that they could not get away, onto the surface of the water.

From the top of the water the basin sloped up in a sharp curve for at least two inches. The surface of the tin was smooth and slippery so that it seemed perfectly certain that the turtle had not the slightest chance of escaping.

The moment I put that turtle into the water he started for the edge of the basin. When he struck the tin with his nose, he tried to raise himself up in the water and crawl up and over the top to liberty. But, just as I had foreseen, the tin was so smooth and slippery that his little claws, sharp though they were, could get no hold on it. After painfully and laboriously forcing himself up half an inch or so from the surface of the water, his feet would slip and down he would go again into the depths. Time after time the little fellow tried to climb the impossible tin sides of the basin, but as often slipped back again into the water, frequently turning half over as he fell.

I got some fresh flies, and dropped them right in front of the turtle's nose. But he didn't seem to want any flies; they were no temptation at all. He brushed them aside with his flippers, and kept trying and trying to climb the slippery basin. I picked the turtle up, and gently laid him on top of the stones in the center of the water. I thought he certainly needed a little rest. But he plainly didn't want any rest. The moment I let go of his shell, he climbed down from the rocks and swam across again to where

the water lapped against the tin sides of the basin.

I noticed, too, that the turtle didn't keep still in one place, trying time after time to climb up at the same spot. He was all the time swimming, as well as trying to climb, and within half an hour had completed the circuit of the basin and had apparently tried every inch of the sides for a possible foothold without success.

Then I thought: "He will certainly make up his mind that he has been attempting the impossible, and will swim over and take a rest." But he didn't. He started on another circuit of the basin without a second's delay.

I had been watching the little cuss for more than an hour when mother called me to come and fill the wood-box. Then father came in from town, and I helped him unhitch the horses and bed them down for the night. When we walked up to the back porch I pointed out the basin, and called his attention to the turtle, which was still trying vainly to mount its sides.

"That turtle has been trying to climb out of there for a couple of hours," I said. "Every time he tries, he slips back again."

"That turtle knows what he wants most," said father, "and he's just simply bound to get it before he quits."

Well, sir, before I went to bed, I tried to tempt that turtle with little pieces of fresh beef and some more flies, but he never paid any attention to them. He kept busy all the time swimming around the edge of the water in that basin and trying to climb out of it.

Finally I turned in, saying to myself that by morning my pet would learn how foolish it was to try to climb that slippery tin and would give it up. I was up at 5 o'clock the next morning—my regular time. Nowadays I often have hard work to get to sleep before that time. First thing I did was to run out on the back porch and look for my turtle. The tin basin was sitting just where I had left it. The water and the stones were still in it, but the turtle was gone.

I just sat down and looked blankly at the basin. To save my life I couldn't figure out how it was possible for the little thing to get up the steep tin sides. But he was certainly gone. All the flies and little scraps

of meat were still in the basin. The turtle had not stopped to bother with them. It had kept straight after the one thing it wanted most until it finally got it. How, was to me a mystery.

I thought a good deal about that turtle in after years. You might think the lesson it taught was that of perseverance. But perseverance is an effect and not a cause. It was persevering because it wanted to get out of that basin more than it wanted anything else. It didn't stop to eat flies, or to rest on the stones, because there was always one thing else which loomed so much larger in its eyes.

For a man to win success is a more complicated matter than for a mud turtle to get out of a basin—but the same general principles are involved. The reason why more men do not succeed is because they have no definite aim in life—because there is no one thing they want more than anything or everything else. Once a man is filled with the idea that there is something he wants so badly that he must have it, I firmly believe that he is almost certain to get it sooner or later—bar circumstances which are beyond human control.

When he starts in, the job he has undertaken is pretty likely to look impossible, at least to everybody but himself. As he goes along he will find plenty of chances to sit down and rest, and to stop and eat and drink, or to enjoy himself in some other way. But if he really wants what he has started after, he'll keep after it in the face of all kinds of temptations.

At the end, people will wake up—just as I did—and be terribly surprised to find that he has accomplished it. And nobody will be able to see just how he was able to do it. That is the reason why it is so hard—really impossible—to give the secrets of the success of any successful man. Every successful man is a mystery to everybody else.

Some months after my turtle disappeared, mother told me one night that she was probably responsible for that turtle's escape.

"I saw the poor, little thing trying so hard to get out of that basin," she said, "and I couldn't help feeling sorry for him. He was working so hard, and he kept slipping back every time he got started up. So I put a little stone into the water at the side of

the basin, so that he could rest himself on that. I really had no idea it would enable him to get away. But I suppose it did."

That's the way it works among men, too. Once a fellow demonstrates that he is simply determined to get something, other people will go out of their way to help him a little. Determination seems to compel helpfulness. And I fancy you would find in the life of almost every successful man some little stone placed at the edge of the deep water, by somebody who was moved by his struggles to do a little something to make the fight easier for him.—*Henry M. Hyde in the Technical World.*

NEWS FROM TWO-FIFTY.

Local conditions are not changed since my last letter. In fact, there seems to be no indications for any new work or employment of electrical workers. It was expected that the United Gas and Electric Company would build a new lead from Mt. View to this city, but it appears to have fallen through or the work postponed. The Interurban Railroad keeps but two gainers, and they have no new work in prospect. There has been some talk of extending the First Street Railroad to Campbells' but as yet nothing has shown up to indicate an early start. Persistent rumors are afloat that an independent telephone company will be started in this city. It is believed that this is but an extension of the Home Company from Los Angeles, and which has recently completed its plant in Santa Barbara. Whether this is so or not is only a conjecture.

Our local inside men are all employed, but there is just enough work to keep them going. Our new schedule, which went into effect, prevents journeymen from doing electrical work and the contractor from doing the same. This gives both sides an equal chance to make a living and the business agents of the council are keeping a strict lookout for infringers and violaters.

We had our election of officers and the quota is about the finest that could be secured. A few visiting brothers passed through here during the past month.

CHARLES H. HARRISON.

San Jose, Cal., July 25, 1904.

EVERY NOBLE WORK IS AT FIRST IMPOSSIBLE.

A successful railroad president was once asked by a young man, "What is the secret of success?" "My boy," he said, "there is no secret; it is just *dig, dig, dig*." In all likelihood this was not the answer the young man anticipated. He expected to hear of some "get-rich-quick" scheme that meant neither time nor energy.

Last year a young man made application to enter a certain Western college, and, in talking over the studies with the Dean, asked if there were no shorter way to get through and graduate than the course prescribed. "That depends entirely on what you want to be," replied the Dean. "When God wants to make an oak, he takes fifty years; but when he wants to make a squash, he takes six weeks." What a lot of squashes we find in every trade and profession—half-baked, underdone people who seldom succeed, because they refuse to give the time and thought to equip the brain and hand with the training the world is always ready to pay for.

Of course, difficulties, sickness, and care of one kind or another enter into the lives of all men, placing, as it were, barriers across the path of progress. This is certain to be the lot of the average human being; and yet a trying circumstance is not a sufficient reason for a man to give up the struggle and take a back seat. If such were the case, what would the world be to-day? Take one illustration—Elihu Burritt was the son of a poor shoemaker. To save money to secure an education, he worked from daylight to dark in a blacksmith shop. Discouragement stalked all around him, but young Burritt persevered and won a place among his country's successful men. Do you wish to live without trial? Then, if your wish is gratified, you will die a squash, an underdone man. Without the struggle, you never know your strength. It is the rough seas that make the skillful sailor. Unless you go "up against" the world, you will never find yourself. Hardship is the native soil of true manhood.

The trouble with most people lies in the fact that they require such favorable conditions before they are able to accomplish anything. To-day the men who succeed are the

men who do things with very little. When they have a task to perform, they take what is at hand, and without any further delay settle down to work. You who are an engineer, think of James Watt making the model of his condensing engine out of an old syringe; or George Stephenson, the coal miner, building his first locomotive in a little outhouse; or Michael Faraday, while a bookbinder's apprentice, experimenting in electricity with old bottles. These men's names are household words throughout two continents; yet they were not "born with silver spoons in their mouths;" they attained their training and success through great personal effort. Few young people to-day face the obstacles these men overcame. They were not content to sit and wait until all the conditions were favorable for their work; they made the conditions favorable by untiring effort.

No success is attained in this day or age without intelligent effort; and the quicker we get this truth into our heads the better, even if it has to be beaten in. What the world wants most is people who "do things." During the Civil War, President Lincoln found many generals who made a splendid appearance on parade, whose showing in the matter of discipline and efficiency was excellent, but they failed to "do things." When ordered from Washington to carry out some movement, the cavalry horses were sick, or the roads were bad, or they did not have enough men; and while they waited for more favorable conditions, the opportunity passed. Lincoln promoted Grant because he could do things—a leader who accepted the conditions as they were, and, without grumbling, made the most of them. It is not the conditions that make a man's success, but the trained skill and perseverance of the man himself. A pan of water and two thermometers were the tools by which Dr. Black discovered latent heat. An eminent foreign scientist once called upon Dr. Wollaston, and requested to be shown over his laboratories, where he had made so many important discoveries. The doctor took him into his study, and, pointing to an old tea tray on the table containing a few test papers, a small balance, and a blowpipe, said, "There is all the laboratory I have." Had Dr. Black or Dr. Wol-

laston put off their investigations for more favorable conditions, ten to one we should never have heard of them.

In every phase of business life, what the employer wants is men who are not always growling about poor tools, or lack of room, or better machinery, but men who take the shop, tools, and machinery as they are, and do their best. Such men are seldom out of a job. They are too valuable to their employers.

In battle or business, whatever the game,
In law, or in love, it's ever the same;
In the struggle for power, or scramble for
self,

Let this be your motto—Rely on yourself.

—*The Technical World.*

GOVERNMENT CONTROL OF WIRELESS TELEGRAPHY.

According to advices from Washington, D. C., the Navy Department has signed a contract with a wireless telegraph company for wireless service under government control, says *Electricity*.

The Navy has felt keenly the necessity of a wireless connection between its naval bases at Guantanamo, Culebra and Key West, realizing that in the event of hostility with a foreign power the existing cable system would be the first point of attack. The necessity of protecting the canal zone has enlarged the problem of finding a secondary means for communication, and the general board has learned a lesson from the isolation of Port Arthur in the present war. Therefore, some time ago, the equipment bureau began a series of competitive tests under the immediate direction of Lieutenant-Commander Jayne, and the result was the arrangement between Admiral Manney and Mr. White to sign a contract for the supply to the government of wireless instruments guaranteed to maintain trustworthy service on these circuits: Key West to Panama, 1,000 miles; Porto Rico to Key West, 1,000 miles; South Cuban coast to Panama, 720 miles; Pensacola to Key West, 450 miles, and South Cuba to Porto Rico, 600 miles.

The service proposed is exceptional, in that the wireless currents must traverse not only the ocean, but leap over islands, such as Cuba and Hayti, and in the latter

case, and perhaps in others, run a risk of crossing currents set up by apparatus on islands not a part of the United States. The contracting company assumes full responsibility for the working of the system in such cases.

On its part, the government agrees to operate in harmony with such stations and vessels as now use the De Forest system, and this is said to extend to Panama. The government's instruments will be attuned to harmonize with those of the company to prevent interference. The Navy will have the company's key, so the two may work interchangeably without the possibility of their messages being picked up, or stolen, or suppressed by vessels or stations equipped with other kinds of apparatus. The enormous value of wireless telegraphy in naval operations, as revealed by Admiral Togo's late exploits off Port Arthur, hastened the action of the Navy Department in closing this contract.

It is also announced that the De Forest Company has begun the erection of a wireless station at Seattle, Wash., for the purpose of experimenting on the Pacific, and it is said that an attempt will shortly be made to communicate with Japan.

AN ERROR IN DIAGNOSIS.

Stories of railroad accidents were being told at Tuxedo. Spencer Trask, the well-known banker and author of New York, said:

"In a certain collision one of the victims lay for a long time on his back across the ties. Finally two men picked him up, carried him to the station, and placed him on the floor.

"He'll lie easier here," they said, 'till the doctor comes.'

"The doctor came a little later.

"This poor chap is done for, I'm afraid," he said, glancing at the prostrate victim.

"Then he knelt down, lifted one of the man's closed eyelids, and peered into a dull, blank, unseeing, lifeless eye.

"Yes, he's dead all right. Take him away," said the doctor.

"But the pale lips of the injured man moved slightly, and a feeble voice murmured:

"That was my glass eye,' you fool.'"

WHO WILL DIG THE CANAL.

"Who will do the actual digging of the Panama Canal?" The discussion of this question in the newspapers is serving a good purpose if it is convincing everyone, in and out of public office, that there is no single source from which the War Department can obtain an adequate supply of labor for the task intrusted to it. Workmen to cut the canal in the fashion of Americans, not of Pharaoh, cannot be drawn from even two or three, or any limited number, of local labor markets. The government is being warned through the press not to count upon getting great numbers of Jamaicans or other West Indians; not to put trust in Chinese labor wholly, or white labor at all, etc. We need not repeat the long list of warnings here, either to accept or to deny their validity, since all are beside the mark.

The canal—it has so often been said—is to be cut for the benefit of the whole world; and in the sharing of benefits no states are likely to gain more than the Latin-American republics. The old conditions on the isthmus that added to the peril of a tropical climate the perils of filthy and dissolute living are to be utterly changed; and problems of sanitation and engineering are to be attacked with spirit and thoroughly solved. The work is of such a character that, while it proceeds, the isthmus will be a school of applied science; it will be in some ways the best of schools at which to learn, through participation and observation, how to solve problems of sanitation in the tropics and how to carry on successfully in the very worst parts of the tropics the most difficult sort of constructive undertakings. Now, these are precisely the problems which confront the Latin-American countries. Their governments will do well if they send to the isthmus a few of their brightest young men, with some of their best laborers, as Japan sent her young men to work and study in Europe and the United States during the last two or three decades.

"But," it may be objected, "Japan had men to spare, while nearly all of the Latin-American countries are in need of immigrants." We answer that the Latin-American countries know full well what course they must adopt to attract immigration to their shores; they understand that good re-

sults follow any conspicuous effort they make to put themselves in line with progressive states. Co-operation in the work on the isthmus will therefore bring a two-fold advantage; it will increase their prestige while hastening the completion of the canal. For such a purpose the least populous of the coast states can spare a few hundred men. If contingents are furnished by one-half of the islands of the Greater Antilles and one-half of the Central and South American countries, the War Department will have as a certain reliance at least several thousand picked laborers inured to the climate, and placed in charge of responsible engineers from their own homes.—*Harper's Weekly*.

THE OFFICERS OF NO. 1.

In the course of events changes are necessary, and No. 1 being no better than the rest of the Brotherhood, she made changes the first of July, 1904. The change made does not reflect on the retiring officers. They did their duty, as well as any ever in office, and still continue representative members and willing workers. This being a very busy year, requires good stock to keep up with things, and not be taken in by unprincipled people and at the same time to act honestly with the deserving ones. In the selection of Brother H. J. Parks for president, every one knowing him can say nothing but good. Brother Parks is one among the old-timers, and has kept apace with the times, and unless some great temptation should overcome him he will prove to be an efficient and honest officer. The next in choice is honest, outspoken "Single Tax" Charles Wills, vice-president, who will always be found on the side of the oppressed, and have the interest of No. 1 always at heart. If anything goes wrong at his end it will not be on account of maliciousness, but a plea that affects his heart. For all that know him, have but one opinion, and that is earnestness, charity, and honesty predominate.

The "Little Giant," H. J. Morrison, is the man that holds the pen at the desk of recording secretary. He has served before and if he had not done his duty, certainly would not have been the choice of so much good stock. Brother George Weller is

again handling the funds of the union. There is but small possibility of any change as long as Brother Weller chooses to hold the office of treasurer.

The business agents are men that have been tried, and as their names imply are fighters, not so much physically as orally. Brother J. J. Dooley is one of the most widely known members of the Brotherhood, and is known to be O. K. Pat Coughlin, "The Irish Jew," has served the Brotherhood so often and so effectively that nearly every union man has heard of him. He can talk and do it well, unless handcuffed.

The executive board are all true blue and save many contentions on the floor of the union, thereby facilitating matters. The examining board are fine, and every one seems to feel that the interests of No. 1 and the traveling brothers will be taken care of honestly.

The general factotum, or scape goat, and one to take the abuse of all members, but who makes them pay down their good cash, is yours fraternally,

BALDY.

St. Louis, Mo.

THE CHILDREN OF THE MILLS.

Oh, the silence of the children in the Sunny South to-day,

Is sadder than the cry of fettered slaves. Lean and listen and you will hear the roaring of the mill,

And the sighing of the winds through open graves, But the voices of the children—they are still—

Oh, the roaring of the mill, of the mill.

They no longer shout and gambol in the blossom laden fields,

And their laughter does not echo down the street.

They have gone across the hills, they are working in the mills,

Oh, the tired little hands and aching feet, And the dreary, weary life that stunts and kills;

Oh, the roaring of the mills, of the mills.

All the pleasures known to childhood are but tales of Fairyland.

What to them are singing birds and running streams?

For the rumble of the rill seems an echo of the mill;

And they see the flying spindles in their dreams,

Life is one, in summer's heat or winter's chill,

Oh, the roaring of the mill, of the mill!

In this boasted land of freedom they are bonded baby slaves,

And the busy world goes by and does not heed;

They are driven to the mill just to glut and overfill,

Bursting coffers of the Plutocrats of Greed,

When they perish we are told it is "God's will"—

Oh, the roaring of the mill, of the mill.

Still from valley, plain, and hamlet, lofty steeples proudly rise,

And droning tones of preachers prate of crimes;

And the gospel venders still sell the people of the mill,

Lakes of fire and fields of glory for their dimes,

And they pray beside the graves the children fill;

Oh, the roaring of the mill, of the mill!

—Ella Wheeler Wilcox.

A FETTERED GIANT.

Labor creates capital, but has none.

Labor garners the grain, but eats the chaff.

Labor builds palace trains and automobiles, but walks.

Labor builds labor-saving machines, but labors harder than ever.

Labor manufactures guns and is shot down with them.

Labor builds schools and universities, but remains in ignorance.

Labor elects representatives, but has no representation.

Labor has the ballot, but doesn't know how to use it.

Labor builds streets and public highways, but isn't allowed free assemblage upon them.

Labor has brains, ability, and the power to change and remedy all this, but is afraid of its own power.—*Glassworker.*

HABIT—A GOOD SERVANT OR A BAD MASTER.

"If an idiot were to tell you the same story every day for a year, you would end by believing him." So said Burke, when discussing the influence of habit; and though the statement sounds radical, it contains a large element of truth. Life is made up of an infinite number of little things, repeated over and over again until their performance becomes so mechanical that they are done unconsciously.

ANIMALS AND MEN ALIKE.

When you climb a stair you always take the first step with a certain foot. When the hand is raised to the face it almost invariably touches one certain spot first; and so on, of a thousand other acts. Life is made up of unconsciously formed habits. In the course of time these habits acquire a power over us that enslaves every function of the mind and body with chains that few are capable of breaking. The same phenomena of habit are found in animal life. A certain clergyman, living in the outskirts of the city, drove every morning into town for his mail. The horse, from habit and with no suggestion from his master, went each week-day morning directly to the postoffice, but on Sunday morning passed the postoffice and went straight to the church. A friend once told me of a dog owned by a neighbor—who, by the way, was a Quaker. First day and fifth day of each week the dog went to meeting. If the family went, he went with them; if not, he went alone, and always occupied the same place.

JUST ONCE MORE.

It is so easy to form habits—good and bad. Just one little lie to help you out of this difficulty. Just one little indulgence, and a good night's sleep will fix you up all right. Just one small part of your work slighted—nobody will notice it. Quite true, but the facility and inclination acquired by such acts will lead to their repetition, until you become, even against the protests of your better nature, a slave to them.

THE FAULT-FINDER.

One of the most common and objectionable habits is that of fault-finding. Certain people never see the wallet on their own backs, though everyone carries two packs—

one before, stuffed with the faults of his neighbor; and the other behind, stuffed with his own. If the best man that ever lived had his faults written on his forehead, he wouldn't walk a block before drawing his hat over his eyes. Thomas Carlyle is one of the great names in literature, but for years he was the champion fault-finder of Great Britain. He was "down" on everything and everybody. On one occasion he rode sixty miles to consult an eminent Edinburgh physician about his health, and, on his return, expressed himself in the following terms:

"I find," he said, "that I might as well have ridden sixty miles in the opposite direction, and poured my sorrows into the long, hairy ears of the first jackass I came upon, as consulted with this medical man, for all the good he did me."

This habit of fault-finding wasted more of Carlyle's energy, and cast a shadow over more of his pleasures, than the real obstacles which beset his path. Don't attempt to regulate the world, it's a big contract.

A FIT REBUKE.

One of those people who fail to see or find anything without picking a flaw in it, received an effective rebuke while visiting St. Louis last month in company with a friend. In the evening after the first day's sight-seeing, the fault-finding gentleman suggested that they meet next morning at the gate of the Palace of Electricity. To his astonishment his friend replied:

"I will tell you frankly, I would rather not see any more of the Exposition with you. I came to St. Louis to enjoy myself, and that enjoyment needs the accompaniment of sympathy with others. Now, you seem to dislike everything, find fault with everything; you do not see anything which you do not find inferior to what you have seen before. This may be very true, but it makes me uncomfortable. I believe that if I were forced to live with you, I should commit suicide."

Gentle reader, don't be a chronic kicker.

THE BOY AND THE BUTTON.

There was a boy at school who always stood at the top of his class. The boy next to him noticed that when answering a question he always fumbled with his fingers a particular button on the lower part of

his vest. Chance offered an opportunity, and the observing lad removed the button with a knife. When the boy was again questioned, he felt for the button, but it was not there. He looked confounded, stammered, and sat down. His companion answered the question and got his place. Guard against forming any of these seemingly insignificant habits; when you least expect it, they will place you at a disadvantage.

How shall I a habit break?
As you did that habit make.
As you gathered, you must lose;
As you yielded, now refuse.

Thread by thread, the strands we twist,
Till they bind us neck and wrist;
Thread by thread, the patient hand
Must entwine ere free we stand.

As we builded stone by stone,
We must toil, unhelped, alone,
Till the wall is overthrown.

HE GOT A RAISE.

Periodically James Gordon Bennett comes from Europe to inspect his newspaper plant in detail, and careful preparations in all departments usually precede his coming, but recently one unhappy printer scandalized his fellows by appearing in a semi-tipsy condition on the momentous day. The man was barely able to keep awake, but was still sufficiently alert to evade the foreman until Mr. Bennett discovered him in person. During an unguarded moment the unfortunate printer had run his face against an ink roller, and his face was covered with a thick black smudge of ink. He did not move during inspection, but leaned sadly against the wall and returned Mr. Bennett's gaze pathetically. Mr. Bennett said nothing until the moment of leaving, and then called the foreman after him. Presently the foreman returned furious. Shaking his fist in the ink-smudged countenance of his subordinate he ejaculated:

"Say you wash up an' go home, and come back to-morrow when you are sober."

"To get my wages?" stammered the offender. "Am I bounced?"

"Naw!" snorted the foreman in disgust. "The boss called me out to say that you

look like the only man in the shop that works, and he raised your wages \$5 a week, d—— you!"—*Exchange*.

LEFT BEFORE THE FIGHT.

The court records in which the Kentucky mountaineer figures as principal abound in grim humor.

Up in Clay County "once upon a time" a Christmas frolic ended in a tragedy. Old Mrs. Philpot was a witness.

"Tell us about the fight," said the lawyer.

"I never seed no fight," replied the old lady.

"Well, then, tell us what you did see," remarked the lawyer in a careless sort of way, thinking she knew something.

Mrs. Philpot moved her sunbonnet back, lit her pipe and proceeded:

"Cy Sewell, he give a Christmas dance, and me and a whole lot of others wuz thar. The boys and the gals they got to dancin' round and round, and they got to slappin' each other, an' finally one boy he slapped another boy too hard—harder than he 'lowed to—an' knocked him down. An' the boy what got knocked down, he got up and jerked out a great big knife, 'bout long as your arm, an' whacked him right across the middle from side to side. An' then the brother of the big fellow what got cut he pulled a British bull-dog 'bout the size of a ham an' let go six 44's right squar into the fellow that had the knife, an' jest then Bill Smiley—Bill's a cousin of Jake Haynes, what got shot—come runnin' oufen old man Sewell's room with a double-barrel shotgun an' let off both barrels inter the crowd; an' old man Sewell he got excited, an' jerked a Winchester rifle outen from under the bed an' went to pumpin' lead inter the gang; an' by that time, the house was full o' 44's an' smoke, an' flashes an' hollerin', an' I seed thar wus goin' to be a fight, an' I left the house."

ALL THE BROTHERS WORKING.

We have taken in two new members and they say they have received many benefits. Our brothers are all working up to the present time. Our new officers have been installed, and we hope for a successful year.

F. P. GREINER.

Local No. 235, Cincinnati, Ohio.

NEW YORK'S TELEPHONE SERVICE.

In Greater New York there are in round numbers about one hundred thousand telephones, over which a little more than a million messages are daily transmitted. To put the various subscribers into communication, requires the services of nearly 1,800 employes and costs upward of \$4,000 per day. In other words, to transact the daily message business demanded by New Yorkers, requires an expenditure of time equal to five years' work of an ordinary man, and an outlay approximately equal to as many years' salary of the average wage earner. Telephone service in other cities and towns is proportional to the number of telephones, so that last year it was estimated that in the United States there were over five billion messages, employing the entire time of about 80,000 persons, costing \$35,000,000 in salaries and wages. Such statistics convey some idea of the labor and expense of modern telephony.—*Arthur Vaughn Abbott in Cent Per Cent for July.*

SCIENCE IS MAN'S GREATEST FRIEND.

The work of the scientist is usually looked upon as a more or less fanciful occupation, uninteresting to the general public.

But, as a matter of fact, scientific investigation and exploration, which means an understanding of the application of nature's forces, is from the point of view of the masses the most hopeful thing in our civilization.

If we could have seen some years ago a scientific gentleman experimenting with ammonia and other materials for reducing temperature, we should have thought that he was amusing himself harmlessly but uselessly.

Go down along the shore now on the coast of New Jersey, or anywhere else, and find one of the hard-working colonies of fishermen.

They will tell you that formerly they caught their haul of fish and carried it to town. All of the fishermen arrived there together to compete with each other. They all had big supplies of fish at the same time. Then the dealers, having them at their mercy, gave them almost nothing for it, or even compelled them to throw it overboard. If the catch was small, the price of

fish was somewhat better, in spite of the dealers' organization, but the fishermen had little fish to sell.

Now the fisherman points out to you on the shore, a few yards away from his nets, a cold storage plant that belongs to him and his fellows. They catch their fish and find out what price they can get for them, before taking them to market. If they are too cheap, they put them in cold storage and wait for the price to go up, that they may be decently paid and not give all the profit to the dealer.

Science helps the truck farmer near the big cities, if he is up-to-date, and especially if he is lucky enough to live in a neighborhood where cheap telephone rates prevail.

Formerly the truck farmer loaded up his product and took it to town on the chance of finding a good market. When he got there he was very apt to find that everybody else had brought just what he had brought, and that he was at the mercy of the middleman, always ready to take advantage of the producers' competition among themselves.

Now the truck farmer, before picking his berries or cutting his lettuce or pulling his peas, gets hold of his middleman on the telephone and makes his bargain for a cash sum to be paid the following day for such and such produce. He no longer drives to town to find that he can get nothing for his goods, to haul them back or throw them away.

This improvement, of course, in the condition of the farmer will apply much more widely when the gentlemanly thieves in control of the Telephone Trust shall have been brought to book, and when the telephone shall be made a real benefit to humanity through government or municipal ownership, instead of a means of extortion.

A number of queer scientists that would probably have been called freaks experimented in days past with the problem of sending the human voice over wires. To-day they do more good to humanity than a million of the most practical and self-satisfied men.

If we should see a solemn old gentleman in spectacles studying insects through the microscope or setting one tiny creature to fight another, what should we think of him?

We should probably smile indulgently and say: "He does no one any harm, but, of course, he cannot be of any practical value."

But these scientific students of insect life, so much made fun of in comic papers, are most important workers for good.

The boll weevil, for instance, has been destroying annually more than forty million dollars' worth of cotton. A certain insect student, Professor O. F. Cook, has found an ant that will destroy the boll weevil. We make a fuss over a Carnegie or a Rockefeller who gives away one million as a rarity. But here is a bug professor who makes his country a present of more than forty millions a year—forever—and his name is hardly known.

The cultivation of oranges in Southern California was at one time threatened with extinction. A parasite deposited upon the tree a spongy mass—the "cottony, cushiony" parasite, it was called—and the life of the tree was destroyed by this mass that was intended as food for the parasite's young after the hatching of the eggs.

A scientific gentleman discovered that the ordinary red "lady bug," called by wise men "*vedolia cardinalis*," would destroy the eggs of the orange tree parasite and thus save the tree. That simple discovery, followed by the importation of several colonies of lady bugs, preserved a great and important industry.

The same story can be told in all departments of industry, and of agriculture. With scientific farming machinery, one man can do the work of ten, and the country is still fed despite migration to the cities from the farms.

Science, one day, will solve our great practical problems, by adding infinitely to the production of wealth, to the effectiveness of labor, to fertility of the soil (as yet not one-tenth part developed), and to the comfort of humanity in all directions. Avarice, our greatest curse, will disappear when science shall have made it impossible for any willing man to lack the comforts of life.

Science will cure our diseases or stamp them out entirely, plough our fields, make the masses independent of the selfishness of the few.

But do not fear that there will be nothing

left undone after science shall have done its work.

Science cannot make better men. Men cannot think by machinery, or improve in morals by machinery.

They will have to work out their own moral and social salvation through their own intelligence.

The abolition of poverty and of avarice, however, will do away with a majority of the incentives that lead to evil. Science will make it easier for us to be good men, even if it cannot make us good.

Respect, hereafter, the wise ones that grind away at science. Follow their doings respectfully in the newspapers. When a Lord Kelvin or a Marconi comes among us, let us try to get as much excited and interested as though he were a German prince or a "heavyweight champion."—*New York Journal*.

IMPROVING ELECTRIC LIGHTING SERVICE.

At a recent meeting of the Incorporated Municipal Electrical Association, of England, an address was given by the president, Mr. T. P. Wilmshurst, which dealt principally with questions of local interest only, but the following excerpt is of more general interest:

The growth of our business, as shown in the periodical returns which are available, is very satisfactory. It is advisable, however, to remember the great progress which is also being made by our competitors. In recent years the gas business has received an enormous impetus from the introduction of the Welsbach mantle, and it would be folly on our part to disregard their experience. Rather let us see if the methods they adopt cannot also be adopted with benefit to ourselves.

When the old flat-flame burner was in general use the burner was of the simplest possible character, and if kept clean would last an indefinite time without attention. The old order, however, changed with the extended use of the Welsbach mantle. This gradually deteriorates with use and has to be replaced at more or less frequent intervals. Neglect of this results in discredit being thrown on the supply. Gas engineers have not been slow to see that for the credit of their undertakings some sort of super-

vision of the consumers' fittings is to the interest of both buyer and seller. We find, therefore, an increasing tendency for arrangements to be made whereby, for a small payment, a periodical inspection is given.

Now, the position of the incandescent electric lamp is analogous to that of the mantle. It is a device requiring technical knowledge in its selection, so that lamps of reasonably high efficiency and long life may be used. Yet how many of our consumers consider life and efficiency before first cost when purchasing?

The result is, inefficient lamps are used and are allowed to burn beyond the "scrapping point," and heavy bills follow; the supply is blamed as "not being so good as it used to be," and strained relations arise between our consumers and ourselves. I believe, therefore, that if we wish to continue and increase our rate of progress, the following suggestions are worthy of consideration:

1. The periodical renewal of consumers' lamps, free, or on easy terms;
2. The periodical inspection of consumers' lamps *in situ*; or
3. The free testing of, and reporting on, consumers' lamps.

I am aware that there are deeply rooted objections to the first two courses. Many engineers (and their consumers) shrink from organized domiciliary visits and from interference of any sort beyond the meter. Another objection often urged is that we do not purvey light, but electrical energy, and consequently it is no concern of ours how that energy is used.

Though I have no sympathy with the principle of the municipality undertaking wiring or interfering with the legitimate business of the local contractor, I believe that only good can result from our selling lamps of good efficiency at the lowest possible price. The opponents of municipal trading will, I think, admit that this is germane to the business of electricity supply, and parliament has recognized this by permitting in many local acts the clause authorizing us to "sell, let on hire, and otherwise deal with electric lamps," etc.

Personally, I am strongly in favor of the policy of testing free of charge all lamps which the consumer likes to send us; the

expense to us is very small, and there should be no difficulty in arranging for the tests to be carried out during the night shift or some other convenient time.

AN ELECTRICAL DIVINING ROD.

An ingenious apparatus has been brought out in England for detecting the presence of minerals in the ground by means of an electric current, says *Electricity*. This perfected device was recently exhibited in London by one of the inventors, and its working was explained by Professor Silvanus Thompson.

As long ago as 1854, a well-known English inventor, Mr. James B. Lindsay, patented a device for sending electric signals through the ground; but it was Sir William Preece's discovery, in his study of the flow of electric impulses through the earth, that the shape and density of the electric field are affected by the geological formation of the underlying strata, which gave the idea of the electrical ore detector recently shown. It is claimed—and the claim is supported by the results of what appear to be very satisfactory experiments—that metalliferous deposits, invisible to the prospector and often undiscoverable by the mining engineer, can be located, traced, and mapped out. Transmitting inductors deliver electric waves which are extremely sensitive to the presence of minerals, and receiving resonators are tuned to detect these waves and determine their character. When the field to be explored has been energized, the operator goes over the ground, and receives manifestations of the waves beneath. As a mineral vein or lode is approached, the waves change in intensity or direction, or both, and when the lode is reached the variation and intensity are most marked. Indeed, the changes that take place in the sounds conveyed to the ear are so well defined that the expert listener can tell much in regard to the depth and width of the ore deposit. Professor Thompson expressed satisfaction that the inventors do not claim that the apparatus will find every kind of ore; but from his own investigations he could assert that for a large number of metalliferous mines which are good conductors the instrument will be of the greatest use.

THE ELECTRICAL WORKER

49

Grand Secretary's Report for July.

No.	P. C.	Int.	Sup.	But.	Totals.	No.	P. C.	Int.	Sup.	But.	Totals.
						82			6 60		6 60
1	197 70	10 00			207 70	83	17 70	2 00			19 70
2	189 20	16 00	1 00		156 20	84	60 60	29 00			89 60
3	500 85	80 00			580 85	86	15 00				15 00
4	17 70	4 00			21 70	87	25 75	6 00			31 75
5			1 00		1 00	88	8 40	4 00			12 40
6			25		25	90	8 10	2 00			10 10
7	32 70	4 00			36 70	91	18 50	2 00		1 00	16 50
8	9 90				9 90	92	6 90	2 00	50	4 50	18 90
10	86 00	4 00	1 50		91 50	93	8 30				8 30
12	29 10	6 00			35 10	95	12 60	2 00	60		15 20
14	56 40	6 00			62 40	96	20 10	2 00			22 10
15	28 20	2 00	2 00		32 20	97	5 40				5 40
16	16 80				16 80	99	11 90	2 00			13 90
77	59 40	4 00	2 50		65 90	100	17 10		2 50		19 60
21	32 70		75		33 45	101	9 00	4 00	50	75	14 25
22	9 90				9 90	102	11 40		50		11 90
23	81 70	8 00			89 70	103	124 90	8 00			132 90
24	60 70	16 00			76 70	105	18 30	4 00			22 30
25	12 30	2 00	4 50		18 80	106	10 20				10 20
26	40 80	2 00			42 80	108	7 60	2 00	7 70		17 80
27	44 40	4 00	1 00		49 40	109	9 90	4 00			13 90
28	47 10		1 00		48 10	111	20 10		8 50	4 50	28 10
29	23 70	6 00			29 70	112	24 60	6 00	1 00		31 60
31	20 30	4 00			24 30	114	23 40	2 00			25 40
34	24 80	4 00	25		28 80	116	15 00	4 00			19 00
35	10 20				10 20	117	10 00				10 00
38	69 60	4 00			73 60	118	14 40				14 40
39	52 20	8 00			60 20	121	27 00	12 00			39 00
40	18 60	4 00			22 60	122	17 40		1 75		19 15
41	15 90	8 00			23 90	123	8 70	2 00	1 25		11 95
42	9 60	2 00	50		12 10	125	26 20	6 00			32 20
44	38 70	4 00	8 00		45 70	126				2 00	2 00
45	26 40	8 00			34 40	127	9 60				9 60
46	5 10	2 00			7 10	129			1 00	2 25	3 25
47	19 80				19 80	180	11 40				11 40
48	8 60				8 60	182	25 50	4 00			29 50
50			8 25		8 25	183	20 70	8 00	50		29 20
51	5 70	2 00			7 70	185	4 50	2 00			6 50
52	32 10	2 00			34 10	186	11 40				11 40
53	11 70				11 70	187	39 00	12 00	2 50		53 50
55	27 00	8 00	2 50		37 50	188	12 00				12 00
56	19 80	2 00	50		22 30	189	7 50				7 50
57	46 50	2 00	1 00		49 50	140	17 10				17 10
58	7 50				7 50	141	19 80		1 75		21 55
59				75	75	142	14 40	2 00	75		17 15
60	24 60	2 00			26 60	143	8 70	2 00			10 70
61	65 90	18 00	2 00		85 90	144			18 60		18 60
62	22 50		50		23 00	145	24 30		1 00	75 00	26 05
63	7 80	4 00			11 80	146	14 10	2 00			16 10
64	18 50	4 00	50		23 00	148	18 90	5 00	1 10		25 00
65	24 00				24 00	149	39 90	6 00	2 00		47 90
67	4 20		75		4 95	150	7 20				7 20
68	29 70	6 00	50		35 20	151	228 30	14 00			242 30
70	16 50		2 00		18 50	155			18 00		18 00
71	3 60	2 00			5 60	156	12 60		1 00		13 60
72	2 40				2 40	157	9 30		1 00		10 30
73						158	1 50				1 50
74	4 50				4 50	159	8 10	2 00			10 10
75	15 60				15 60	160	12 60	2 00			14 60
76	8 70		8 00		11 70	161	11 40				11 40
77	44 40	2 00	75	2 25	49 40	162	5 70		14 40		20 10
78	3 90	2 00			5 90	163	14 40	4 00	18 00		36 40
79	21 00	2 00			23 00	164			2 00		2 00
81	23 40	6 00			29 40	166	3 60	4 00			7 60
						168	9 30	2 00			11 30

THE ELECTRICAL WORKER

No.	P. C.	Int.	Sup.	But.	Totals.	No.	P. C.	Int.	Sup.	But.	Totals.
166	24 60				24 60	264	7 80	2 00			10 80
170	29 70				29 70	265	42 80	12 00	1 00		54 80
171	20 10	4 00	06		24 16	266	8 90				8 90
173	12 30	2 00	12 00		26 30	268	27 00	16 00	1 50		44 50
174	9 00				9 00	269	9 60		65		10 25
176	20 80	4 60	2 25		27 05	270	46 50	14 00	50		61 00
177	7 50		50		8 00	271	24 90				24 90
178	25 80				25 80	274	3 30				3 80
180	21 90				21 90	275	12 80				12 80
182	19 25	4 00	18 00	10 50	51 75	276	38 90	4 00			37 90
183	10 80		4 80		15 60	277	1 80				1 80
187	11 10		50		11 00	278	9 90	2 00	3 50		15 40
190	9 00				9 00	279	80	2 00	25		2 55
191	18 20	2 00			15 20	280	10 50		1 75		12 25
192	6 60	2 00			8 60	283	19 50	2 00	1 00		22 50
193	12 90				12 90	284	12 00		15 00		27 00
195	3 00	14 00	1 25		18 25	288			12 00		12 00
196	20 00	6 00	1 75		27 75	290	9 00				9 00
197	4 80		1 25		6 05	291	14 70	2 00			16 70
198	20 70	2 00			22 70	295		14 00			14 00
199	20 10	6 00	25		26 35	296	3 00		1 50		4 50
201	15 50				15 50	299	24 90	4 00			28 90
203	12 00	2 00			14 00	300	24 60		8 80		33 40
204	11 70	2 00			13 70	303	2 40				2 40
205	6 30		1 00		7 30	304	7 50	2 00			9 50
207			21 00		21 00	305	5 10		8 65		13 75
208	9 00	2 00			11 00	306	80				80
209	12 60				12 60	307	5 70	2 00			7 70
211	9 60	4 00	2 30		15 90	308	3 30				3 30
212	43 10	2 00			45 10	309	9 90				9 90
214	8 10	4 00			12 10	312			13 40		13 40
215	8 40		1 75		10 15	313	12 00	2 00			14 00
216	7 80				7 80	314	2 70				2 70
217	19 50	2 60			21 50	316	9 90	4 00	21 75		35 65
218	10 50				10 50	317	9 00	2 00	60		11 60
220	8 40				8 40	318	4 20				4 20
221	9 00		6 00		15 00	320	4 80	2 00	5 95	75	13 50
224		18 00			18 00	322	5 40		50		5 90
225	17 10				17 10	323	2 70				2 70
226	4 80				4 80	324	6 60		9 00		15 60
227	21 60	2 00			23 60	325	12 60		50		13 10
228	5 10				5 10	326	14 40				14 40
231	9 60				9 60	330	4 50				4 50
232	15 00	10 00			25 00	331	12 60		25		12 85
233	10 50				10 50	332	9 00		1 00		10 00
234	18 00				18 00	334	6 30	2 00	18 00	4 50	30 80
235	26 10	42 00	4 75		72 85	335	6 30	2 00	3 00		11 30
237	15 90		20		16 10	337	3 00	2 00	75		5 75
238	6 90				6 90	339	5 70	2 00			7 70
239	7 80				7 80	341		4 00			4 00
240	27 90	4 00			31 90	342	6 00	2 00			8 00
241	3 30				3 30	345	2 70	4 00			6 70
243	5 70	2 00	75		8 45	347	6 90	8 00	2 50		17 40
244	15 00	4 00			19 00	349	3 30	10 00			13 30
245	30 00				30 00	350	14 40				14 40
247	127 80	14 00	25		142 05	351	5 40				5 40
250	30 00	4 00	50		34 50	353	25 50		50		26 00
251			2 00		2 00	354	18 10	10 00			28 10
252	12 60				12 60	355	14 40				14 40
254	21 60				21 60	359	10 80		50		11 30
256	9 80	4 00	1 25		15 05	360	5 70				5 70
257			1 00		1 00	363	14 40				14 40
259	7 50		75		8 25	365		2 00			2 00
260	2 10	1 00			3 10	366	24 30				24 30
261	8 10	4 00	25		12 35	367	17 10	18 00	1 75		36 85
262		2 00			2 00	368	4 80				4 80

[illegible]

M. K. Clinton, salary, 5 weeks	90 00
F. F. Brown, salary, 5 weeks	65 00
B. B. Goebel, salary, 5 weeks	55 00
B. H. Goldsmith, salary, 5 weeks	55 00
A. E. Malone, salary, 5 weeks	50 00
C. Thorn, rent, August	30 00
Janitor	3 00
F. J. McNulty, E. B. meeting	59 25
E. T. Mallory, " "	79 50
J. P. Connor, " "	58 95
M. J. Sullivan, " "	91 50
E. P. Allman, " "	45 50
F. L. Witters, " "	87 80
F. J. Sweek, " "	62 80
D. Smith, " "	38 05
Mailing Worker	56 40
J. Baumgarten, seals	6 70
Telephone service	4 50
Postage	63 60
Office supplies	2 30
Telegrams	8 81
Express	18 11

5,968 69

RECAPITULATION.

Amount on hand July 1, 1904	28,282 30
Receipts	7,864 74
	35,647 04
Expenses	5,968 69
Amount on hand August 1, 1904	\$29,688 35

Fraternally submitted,

F. J. SHEEHAN,
Grand Treasurer.

THE OTHER SIDE.

The following communication from the Sheffield (Ala.) *Standard*, explains itself:

"To the Editor of the Standard:

"Your editorial, in last issue, referring to the striking linemen seems, to me, unjust, in view of the actual facts, which I ask that you publish in your paper, for the benefit of those of our people who are not familiar with the causes leading up to and precipitating the strike.

"The men were working ten hours for the Sheffield Company at \$2.50 per day. They were required to be at the place of work at 7 o'clock, making it necessary for some of them to rise at 5 o'clock in order to get their breakfast and reach the place of work on time. In some instances they had to walk to Tusculubia or South Florence. This, you can readily see, made the day's work twelve hours in some cases, instead of ten. The telephone linemen are receiving \$2.50 for nine hours' work, and have a meeting place, which they reach by 7 o'clock. They go to and return from their work on the company's time.

"The linemen working for the Sheffield Company became dissatisfied because other linemen receiving the same pay had one hour less to work and a meeting place (at the telephone office). The linemen drew up a short paper, in the form of a request, which was signed by nearly all the members of the union and presented it to Mr. McIntyre, manager of the Sheffield Company. Mr. McIntyre read the paper and told the boys who acted as a committee that he would see Mr. Burt, who is foreman for the Sheffield Company. The linemen called on Mr. McIntyre in the afternoon for an answer and he informed them he and Mr. Burt were busy and had been all day, but he would see Mr. Burt and have a talk with him about it and what arrangements were made with Mr. Burt would prove satisfactory.

"The linemen returned to their work the following day, and after they had started to perform their duties in good faith, Mr. Burt informed them that Mr. McIntyre said; 'Just jolly your boys for a few days, until this line is up, and then dump all.' (This was repeated by Mr. Burt, in the hall.) Of course, the men quit, as you or anyone else would have done under the circumstances.

"A special meeting was called by our union and a vote was taken. All members present, including Mr. Burt, voted the company unfair, and authorized that a formal agreement be drawn up and presented to Mr. McIntyre. This agreement asked for 25 cents advance, nine hours, and a meeting place. A committee called on Mr. McIntyre, presented the agreement, and were told they (the company) were not in need of men. We then had an open meeting to all who desired to come and hear, including Mr. McIntyre, who was invited. It was decided to select a committee, composed of one member from each of the trades, to wait on Mr. McIntyre. They did so and were told the company was not in need of men.

"Another meeting, supposed to be composed of union men only, was called and an executive committee to act in behalf of the linemen was appointed. This committee requested some of our business men to call on Mr. McIntyre and, if possible, ef-

fect a settlement. They were told the company was not in need of men.

"Mr. Burt, who is a member of the I. B. E. W. Local Union No. 378, made the statement in the hall that he would not work himself or work non-union men if a strike was declared. Mr. Burt made the statement immediately causing the boys to quit—promised his support and voted to strike—but, after the men came out, he violated his promise and oath to the men, and put on the spurs and took their places.

"I do not know whether Mr. Burt acted under instructions from the Sheffield Company to bring about this trouble or whether he was playing two hands, but it is certain that he is the agent who was directly responsible for the strike.

"Referring to all threats of destruction of property of the Sheffield Company, I have yet to find anyone who can or will state to me positively who the man or men are who made such threats.

"I declare to you that it is my belief some one is misrepresenting, in order to detract from the big circus until the side show is thoroughly worked."

Brothers, when Mr. Burt comes to your city be on your guard, as he is a genuine scab. There are some more scabs on the job, but not worth mentioning.

E. L. HOWARD,
Financial Secretary.

Local No. 378, Sheffield, Ala.

A CASE OF SHORTAGE.

Last meeting night the local received the report of trial committee on Brother Estinghausen. A motion passed that Brother Estinghausen be suspended until such time as he pays back to the local the sum of \$388.60 and a fine of \$300, same to be published in the WORKER. To-night a motion to reconsider was passed, with the same result. We find \$388.60 shortage in eighteen months' time. How much in three and a half years? Some books he refuses to turn over. Hence this action. We propose to prosecute to the bitter end.

Yours fraternally,

E. B. HORNÉ,
Recording Secretary.

Local 38, Cleveland, O., July 26, 1904.

THE POLYTECHNIC ENGINEER.

The 1903-1904 issue of the *Polytechnic Engineer*, the annual organ of the Polytechnic Institute of Brooklyn, contains an exceptionally interesting and timely article on "The Factors Influencing the Economic Design of Single-Phase Railway Motors," by Mr. Oskytel H. Clarke, which is of particular interest to the electrical engineer.

Comparing the two types of alternating-current railway motor now attracting attention in this country, the point is made that, in general, a straight series motor should be lighter than the repulsion motor. A motor embodying both a motor and a transformer in itself is naturally heavier than a motor alone. The repulsion motor requires a greater field current at low speeds than the straight series motor; hence the short-circuiting current at starting and at low speeds will also be greater, which will make commutation more difficult under these conditions. The fact that a straight series motor may be wound for a low voltage, and used with a separate transformer, while the repulsion motor cannot, without increasing the weight of the equipment, is an advantage in favor of the series motor. There is another advantage in this respect, since the use of a separate transformer enables the equipment to operate at different trolley voltages.

The principal difficulty in commutating alternating-current motors has been the presence of local secondary currents in the coils short-circuited by the brushes. A realization that this difficulty may be overcome is what has drawn attention recently to the commutating type of alternating-current motors. In commutating types of single-phase motors the most important elements besides the speed characteristics are the efficiency and the power-factor. The efficiency of such motors will usually be less than that of a direct-current railway motor of the same output. Comparing these various losses, item by item, with those of a direct-current motor, it is seen that certain losses will necessarily be greater in the alternating-current motor than in the other type. Economies will not be effected by the single phase system because of any advantage of the alternating-current motor over the direct current, but rather through

the employment of an alternating current. The motor itself is merely a single element in the system, but it is such an important one that essential advantages may be gained by employing motors of the proper type.

Mr. Clark, who is the editor-in-chief, also contributes another article on electro-static generators, which gives a brief historical sketch of these machines and the results of efficiency tests. The maximum voltage generated by the Holtz machine is not affected by the maximum of rotation of the plates, but increases as the distance between the discharge knobs is increased. It is also dependent upon the location of the spark-gap with respect to the large stationary balls attached to the collecting combs. The Holtz machine is reversible in its action in the same sense as a dynamo electric machine—that is to say, it will operate as a motor if supplied with electricity from another influence machine. No previous excitation is requisite. The efficiencies of several machines were determined by operating one machine as a generator, and driving a second from this as a motor. The power input to the generator was determined by measuring the power supplied to the driving motor. The output of the static machine running as a motor was determined by means of a strap brake. The following are some of the efficiencies obtained: With a needle-point gap of six inches, the useful output of the generator was 71,200 volts; the current, 0.000,482 ampere, equal to thirty-four watts; the efficiency, 27.1 per cent. With a spark-gap of twelve inches, the voltage was 122,000; the current, 0.000,319 ampere; watts, thirty-nine; efficiency, 22.2 per cent. With a gap of eighteen inches, the voltage was 180,000; current, 0.000,194; power, thirty-five watts; efficiency, 19.5 per cent.

Mr. John Morris Lloyd discusses variable-speed control, and Mr. Henry T. Lees describes a new gas turbine. In this machine the gas is burned under pressure, the products of combustion being supplied to the rotating part of the turbine through a hollow shaft. Passing out from this through openings in the side, the gas expands radially through the first disc. It is discharged from this disc into a chamber, which returns it to a second section of the

hollow shaft. Passing through this it emerges through the second disc, and so on through as many stages as seem desirable. The theory of this turbine is treated thermodynamically.

ELECTRICITY IN PLANT LIFE.

A most interesting project is being considered by the scientific section of the British Royal Horticultural Society. As soon as the necessary funds can be raised it is proposed to establish at the new gardens at Wisely, near Weybridge, a scientific station or botanical laboratory, and one of the special studies to be undertaken will be the growth of plants by electric light as a substitute for sunshine. To be independent of the gloomy English climate, and to produce the most beautiful flowers, and even ripen strawberries and other delicious fruits in winter, is one of the gardener's most cherished dreams. The fact that artificial light will enable plants to grow and fruits to ripen has long been known to scientists. More than forty years ago M. Herve Mangon found that the electric rays would enable plants to form the green chlorophyl or coloring matter of their leaves, and that flowers turned toward the electric lamp just as they turn toward the sun.

In 1879 and 1880 the late Sir William Siemens made some remarkable experiments at Tunbridge Wells, the results of which he showed to the Royal Society. By supplementing the sunlight of day with electric lamps at night, both in the open air and in greenhouses, he caused roses and arums to bloom long before their usual time, melons and cucumbers, vines and strawberries also responding most gratefully to the stimulus of the added light. The sunlight of millions of years ago, stored up in plants which afterward became coal, was thus disinterred and made to do its work over again in ripening fruits and causing flowers to bloom. Although electricity then cost three times as much as now, Dr. Siemens, as he then was, was enthusiastically convinced of the value of the electric light for the garden.

As usual, there were many objectors to the new proposal. A sort of humanitarian outcry was started on behalf of the poor plants themselves. To make them grow

night and day would give them no rest. They would be old and exhausted before their time, and would perish miserably as the result of their artificial mode of life. Experience since then has shown, however, that the plant does not need rest, like an animal. In Norway, Sweden, and Finland, during the short two months of summer, while the sun never goes down, vegetation flourishes with astounding luxuriance and rapidity. Flowers take on the most gorgeous colors and have exquisite perfumes, vegetables grow like magic, and then comes the long winter, and they have a correspondingly long rest.

An even stronger illustration of the power of plants to do without a nightly rest is the great natural gas fire, a steeple of flame, which has burned for generations in the Pittsburg district in this country. All round and just outside the circle of its scorching heat is a ring of tropical vegetation, which the warmth and light have produced, the plants seeming all the richer and more luxuriant for living in a blaze of light night and day alike. Even if plants were really exhausted by artificial light, we grow them not for their own sakes, but for our use. When a greenhouse plant dies there are plenty of recruits to fill its place.

Dr. Siemens found that all plants could not be treated alike. Particularly they varied in the amount of stimulation they could undergo. The delicate lily of the valley, grown by the aid of heat alone, and with a deficiency of sunlight, was sickly and anæmic, flimsy in texture, and with its petals thin and colorless. The electric light gave the flowers their natural rich, white, creamy color, and made the leaves strong, firm, and green. Generally the natural colors of flowers were enriched by the light, and plants which would wither in a high temperature without the light, with its aid flourished exceedingly. The electric light, Dr. Siemens pointed out, would almost save its cost in stove fuel by the heat it supplied and the quicker maturing of plants, and it might be used in the orchard to counteract the effects of night frost. But banana leaves too near the lamp were scorched by its rays. Melons, cucumbers, strawberries, mustard, carrots, beans, tulips, pelargoniums, all matured under the electric

lamp long before the same plants under daylight alone. Subsequent investigations have shown that a great deal of caution must be used in the application of artificial light. Every plant has its own way of responding to the stimulus.

For instance, Prof. Bailey, at Cornell University, and the authorities of the West Virginia Agricultural Station, have found that cauliflowers will grow very tall, but have smaller heads, and radishes develop extraordinary profusion on "top" under the influence of the lamp. But as we do not prize the cauliflower for its stature, or the radish as a foliage plant, these advantages were not worth the cost of producing them. Nearly all flowers are found to bloom sooner, and sometimes with brighter colors. Lettuce becomes marketable four to ten days earlier, thriving best when the artificial light is only used half the night, but some other plants run to seed under its influence instead of developing weight and succulence, and still others mature very quickly, but do not grow big, ending as tough and ancient little dwarfs of no use for the table. Spinach is particularly grateful for the electric beam, but as society does not clamor for spinach out of season the game is not worth the candle. Peas grow more quickly and are larger in the pod. Endive does better without the electric light.

Many points remain for investigation at the proposed experimental station of the Royal Horticultural Society. We want to know just what kind of light and how much of it is needed by each plant. It should be remembered that a plant five feet from the lamp gets ten times as much light as one sixteen feet away. Then the "ultra-violet" rays of the arc lamp, of such immense value to the scientist, are not good for most plants. Dr. Siemens thought if the bare light were used the benefit to the plant would increase. But the opposite has proved to be the case, and lamps with glass coverings or jackets of liquid to shut off the invisible rays have been found better. The incandescent or glow lamp and incandescent gas have also been tried at West Virginia with success. M. Deherain, at Paris, found that the invisible rays were most injurious from a 2,000-candle power arc lamp unless shut off by glass. His conclusion was that the

electric light will maintain a fully grown plant for two and a half months, but is too feeble to support a plant from infancy upward. At the Winter Palace, at St. Petersburg, some ornamental plants placed under the electric light turned yellow and died in a single night.

Prof. Bailey considers that it is well established that maturity and ripening can be greatly hastened by artificial light, and that plants are not injured by "want of rest," but considers that there are many problems to be settled as to the protection of plants from too much light, and the prevention of too rapid seeding and early maturity. In short, it remains for the scientific investigator to observe the exact effect at each stage of growth of the artificial illuminant on the formation of chlorophyll, of starch, sugar, gluten, alkaloids, and the plant's own essential oils, and to determine when and how long the imitation sun should be made to shine.—*Boston Transcript*, July 15.

MEDICAL ELECTRICITY.

Electricity used in various forms has come to be a valuable adjunct in medicine and surgery, and undoubtedly will in the course of time be a much more important factor in the treatment of diseases and injuries than it is even now. Medical electricity is as yet but in its infancy. Of the many modes of harnessing electricity to the use of the medical man the production of X-rays is the most conspicuous, and is fast taking its rightful position as an almost indispensable means of diagnosis in certain cases.

The *Hospital* of May 28, 1904, contains a resume of the latest literature concerning medical electricity. Brock and Stanley Green have pointed out, in the *Quarterly Medical Journal*, that the X-ray tube is of service in the more complete definition of diseased lung in phthisis. They have now had a number of cases to base their deductions upon, and declare that: (1) in no single case in which the physical signs have pointed to disease have the rays failed to detect the mischief; (2) in some cases in which physical signs have been absent the rays have shown deposits in the lungs, and in these cases physical signs have subse-

quently been detected; (3) the early diagnosis is certainly helped; (4) that the extent of the disease is in many cases shown to be greater than the physician thinks; (5) that the progress and results of treatment can be watched with greater accuracy.

Chisholm Williams, in the *British Medical Journal*, gives favorable testimony as to the beneficial effects of high-frequency currents in the treatment of phthisis. In 1901 he recorded forty-three cases under treatment, and now of these, three have died of pneumonia, of tuberculous kidney and of landaceous disease. He advises that the apparatus be the most powerful available. In tuberculosis of other parts, joints, etc., the best results have been obtained by general electrification, combined with a high-vacuum electrode used from the resonator, or the ordinary X-ray discharge. Cases of old-standing tuberculous lesions he states to be very amenable to treatment. In the treatment of lupus he finds the X-ray tube as reliable and to produce as good results as the light treatment. He urges the use of the high-vacuum electrode with a vacuum high enough to produce fluorescence on an X-ray screen. Also the patient should receive on the condensation couch as much as 350 milliamperes and upward. In opening the discussion upon the subject of electrotherapeutics in the treatment of malignant diseases, at the annual meeting of the British Society of Electrotherapeutists, Lewis Jones raised numerous questions of the first importance which demand solution ere much advance can be made. Notably is this the case in the matter of what kind of rays are of most advantage—whether the "X-rays," "cathode rays," or a combination of the two. He personally recommends the use of a "medium" tube, and prefers to operate with the anti-cathode red hot. He avoids dermatitis by arranging the exposures suitably, and continues the treatment for three, four or five months.

Alan Jamieson, writing in the *Lancet*, in referring to the employment of hard or soft tubes in X-ray work, states that he has found that weather affects the rays materially, *e. g.*, on cold, raw days reactions more readily occur. Wild, in the *Medical Chronicle*, has grave doubts as to the prophylactic value of the X-rays in preventing

recurrence after operation for cancer. A case of splenomedullary leukæmia, reported in the *Medical Record*, August 22, 1903, has been treated by Nicolas Senn with great success, and other similar cases have been since reported.

On the whole, notwithstanding the many instances in which skin diseases, and even malignant diseases of a superficial nature, have been treated successfully by this means, it is as a diagnostic agent that the X-rays have yielded the most brilliant results. As remarked before, however, we are only upon the threshold so far as the use of electricity in medicine and surgery is concerned.—*Medical Record*, July 16.

In 1878 nearly all (99.5 per cent) of the Russian railways belonged to private companies; in 1901 these companies owned only 33.5 per cent of them. In Germany private railway ownership decreased in the same period from 38 to 9 per cent.

In 1894, 30,528 horses were at work in connection with the tramways in England; in 1902 the number was 24,120, but last year the total fell to 20,005, and the number is destined still to diminish, as the tramways are rapidly becoming electrified.

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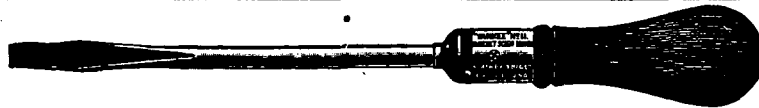
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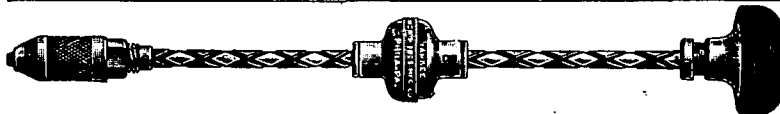
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*No. 29, Trenton, N. J.—Meets every Tuesday evening at Ribson building, corner Broad and Front streets. President, Chas. Gordon, 322 Chapel street; recording secretary, W. N. J. Wood 60 W. End ave.; financial secretary, J. M. Cleary, 711 S. Clinton avenue.

†No. 80, Cincinnati, Ohio.—Meets every second and fourth Wednesday at Cosmopolitan Hall, 1818 Vine street, President, Wm. Seidel, 2822 Harrison avenue; recording secretary, Fred. Seidel, 2822 Harrison avenue; financial secretary, C. A. Palmer, 4222 Cherry street.

*No. 31, Duluth, Minn.—Meets first, third and fifth Thursday of each month, at Bricklayers Hall, Axa Building, 221 West Superior street. President, Wm. Murnian, 229 54th avenue, west; recording secretary, Earl Bradley, 4417 Regent street; financial secretary, C C. Wilder, 118 2nd avenue, east.

*** No. 32, Lima, Ohio.**—Meets first and third Tuesdays at Donze Hall, 219½ South Main street. President, Harry Davidson, 321 McPherson avenue; recording secretary, Charles L. Stout, 854 E. North street; financial secretary, E. D. Wentworth, 727 Holly street.

*** No. 88, New Castle, Pa.**—Meets every Wednesday night at G. A. R. Hall, corner of East and Washington streets, third floor. President, S. A. Wilkinson, Crawford ave.; recording secretary, F. D. Kingsley, 68 Pearson street; financial secretary F. L. Truby, rear 124 Neshannock ave.

†No. 84, Peoria, Ill.—Meets first and third Mondays at Pettitt's Hall, 209 Liberty street. President, Geo. M. Akers, 1808 Lincoln avenue; recording secretary, Frank Mattlin, 400 North Adams street; financial secretary, L. T. Henry, 818 Main street.

*No. 35, Massillon, Ohio.—Meets second and fourth Wednesdays at Trades' and Labor Assembly Hall, McAymonds Block. President F. F. Flockinger, 188 Richville avenue; recording secretary, R. S. Hardgrove, 23 E. Charles street; financial secretary, A. Shorb, 882 West Tremont street.

No. 36, Sacramento, Cal.—Meets every Thursday night at Odd Fellows Temple, 9th and K streets. President, John Richards, 725 L street; recording secretary, A. McDonald, 2580 M street; financial secretary, J. Noonan, 1120 Twentieth street.

No. 37, Hartford, Conn.—Meets every Friday at Union Hall, 235 Asylum street. President, Andy Anderson, No. 4 Hunterford street; recording secretary, James McDonald, 64 Grove street; financial secretary, Dan Murphy, 34 Russell street.

No. 38, Cleveland, Ohio.—Meets every Tuesday at Foresters' Hall, 223 Champlain street. President, S. W. Bell, 1207 Pearl street; recording secretary, E. B. Horne, 19 Wilson Place; financial secretary, W. C. Harrington, 166 McHenry street.

* **No. 89, Cleveland, Ohio.**—Meets every Thursday at Arch Hall, 898 Ontario street. President, J. R. Thomas, 82 Hazard street; recording secretary, G. H. Gleason, 83 Prospect street; financial secretary, R. Gray, 83 Prospect street.

*No. 40, St. Joseph, Mo.—Meets Wednesday
A. O. U. W. Hall, 8th and Locust streets. Pres-
ident, Charles A. Waller, City Plant, Fifth
and Olive streets; recording secretary, Wm.
J. J. J. 1710 Calhoun street; financial secretary,
Jas. B. Ellis, 1202 North Third street.

[No. 41, Buffalo, N. Y.—Meets every Thursday at Council Hall, Ellicott and Huron streets. President, Geo. C. King, 179 Waverly street; recording secretary, Eldred V. Souter, 248 Maryland street; financial secretary, Jos. S. Childs, 596 Illinois street.

(No. 42, Utica, N. Y.—Meets first and third Fridays, at Labor Temple, 18 Hotel street. President, A. Durr, 8 Louise street; recording secretary, C. R. Stringer, 22 Cornelia street; financial secretary, W. J. Root, 272 Seymore avenue.

[No. 43, Syracuse, N. Y.—Meets Fridays (every Friday in the month) at Bartenders' Hall, Empire Building, West Genesee street. President, Charles Brand; recording secretary, James Andrews, 518 N. Salina street; financial secretary, John Kerwin, 106 Belmont street.

*No. 44, Rochester, N. Y.—Meets every other Wednesday at Electrical Workers' Hall, 86 State street. President, J. Desmond, 288 Glenwood avenue; recording secretary, P. H. Brennan, 42 Bartlett street; financial secretary, L. H. Kelly, 88 Lyndhurst street.

† No. 45, Buffalo, N. Y.—Meets every Saturday at Schwartz' Labor Hall, Washington and Goodell streets. President, James Steves, 202 Mulberry street; recording secretary, C. W. Brown, 120 Diamond Place; financial secretary, Jas. M. Rimmer, 89 Pine street.

No. 46, Baltimore Md.—Meets 1st and 3rd Wednesdays of each month at corner Fayette street and Park avenue. President, W. W. Moat, 941 W. Lexington street; recording secretary, R. J. Stewart, 3857 Beech avenue; financial secretary, S. E. Herr, 1408 Whitelock street.

*No. 47. Sioux City, Iowa.—Meets first and third Wednesday of each month at B. T. C. Hall, over 412 and 414 Douglas street. President, Arthur G. Garton, Vendome Hotel; recording secretary, N. J. Nelson, 1123 West Third street; financial secretary, Bert J. Boucher, Vendome Hotel.

* No. 48, Richmond, Va.—Meets every Tuesday night at McDonough's Hall, 700 W. Broad street. President, L. J. Johnson, 6 Seventh street; recording secretary, F. A. Fry, 608½ China street; financial secretary, J. D. Hamilton, 812 Brooks avenue.

? No. 49, Chicago, Ill.—Meets first and third Wednesdays, at Sam T. Jacks' Hall, 28 E. Madison street. President, Alex McGregor, 1807 Tripp avenue; recording secretary, Conrad Cornell, 256 Lincoln avenue; financial secretary, J. C. Jansen, 5841 Shields avenue.

***No. 50, Belleville, Ill.**—Meets second and fourth Tuesdays at Antlers' Hall, A and Spring streets, President, Henry Christian, 108 East Main street; recording secretary, James Workman, 117 South Church street; financial secretary, F. W. Stark, 519 East C street

*No. 51. Estacion, Monclova, Coahuila Mex.—meets fourth Sunday in every month at Council Hall, Monclova, Coah., Mex. President, J. F. Wellage, C. P. Diox, Coah., Mex.; recording secretary, William Dukes, Jaral, Coah., Mex.; financial secretary, Frank Wallace, Box 11, Estacion, Monclova, Mex.

[No. 52, Newark, N. J.—Meets Monday nights at Electrical Workers' Hall, 236 Washington street. President, E. Johnson, 808 S. Orange avenue, Vailsburg, N. J.; recording secretary, George G. Williams, 41 Walnright street; financial secretary, E. J. Beaty, 304 S. Ninth street.]

* **No. 58, Harrisburg, Pa.**—Meets every Thursday at Holtzman's Cigar Store, 315 Market street. President, H. H. Danner, Lemoyne, Cumb. Co.; recording secretary, C. S. Ebersole, 133 South Fourteenth street; financial secretary, C. A. E. Andersen, 46 Summit street.

† No. 54, Columbus. Ohio.—Meets every Thursday evening, at 7 30 at Lazarus Building, corner Town and High st. President, K. C. Taylor, 87 East Third avenue; recording secretary, D. C. Hagerty, 1100 Summit street; financial secretary, J. A. Pilger, 2498 Medary avenue.

*No. 55, Des Moines, Iowa.—Meets every Thursday at Trades' Assembly Hall. Seventh and Locust streets. President, Jas. Fitzgerald, 1924 Leyner street; recording secretary, A. R. Morse, 513 Crocker street; financial secretary, Charles Ladin, Thirty-ninth and Woodland streets.

*No. 56, Erie, Pa.—Meets second and fourth Mondays at Metcalf's Hall, 724 State street. President, Nat. Barton. 1109 Myrtle street; recording secretary, Ed. Semmence, 711 W. Eighth st.; financial secretary, H. Garvin. 1015 Plum st.

Aug. 1904

†No. 57, Salt Lake City, Utah.—Meets every Thursday evening at Electrical Workers' Hall, 11 West First street, south. President, Chas. Reed, Box 402; recording secretary, C. D. Bowman, Box 402; financial secretary, H. M. Murray, Box 402.

*No. 58, Niagara Falls, N. Y.—Every Friday at Mayle Hall, 723 Third street. President, William Watts, 1629 Whirlpool street; recording secretary, H. W. Davis, 2202 Main street; financial secretary, C. P. Mingay, 1008 Fairfield avenue.

†No. 59, St. Louis, Mo.—Meets every Wednesday night at Zebroun's Hall, S. E. cor. 17th and Washington streets. President, Henry Kunderdt, 8140 California avenue; recording secretary, Oscar Otto, 1011 Ann avenue; financial secretary, E. N. Hardy, 1812 Ohio avenue.

*No. 60, San Antonio, Tex.—Meets first and third Saturdays at Trades Council Hall, Alamo street. President, J. P. Broderick, 722 South Princeton; recording secretary, W. B. Freeman, 119 Van Buren street; financial secretary, John Thompson, 319 Lubbock street.

†No. 61, Los Angeles, Cal.—Meets every Thursday at Council of Labor Hall, 438 South Spring street. President, J. E. Walker, 333 Lee street; recording secretary, H. Warner, 135 South Main street; financial secretary, W. Lipscomb, 181 North Quebec street.

*No. 62, Youngstown, Ohio.—Meets first and third Tuesdays at Finn's Hall, northwest corner of Public Square. President, C. A. Onstott, 618 Covington street; recording secretary, M. A. McCabe, 245 East Rayen avenue; financial secretary, W. H. Neuman, 918 North avenue.

*No. 63, Warren, Pa.—Meets first and third Fridays at K. of H. Hall, Second street. President, C. W. Simpson, Warren, Pa.; recording secretary, Otto Bartsels, East Water street; financial secretary, N. H. Spencer, Box 1094.

†No. 64, Youngstown, Ohio.—Meets every second and fourth Wednesday night at Finn Hall, Public square. President, Wm. Cavanaugh, corner Edward and Mt. Pleasant street; recording secretary, C. F. Richards, 786 Lydia street; financial secretary, W. H. Griffith, 786 Crossman avenue.

*No. 65, Butte, Mont.—Meets first and third Fridays at I. O. G. T. Hall, West Broadway. President, L. E. Woodworth, P. O. Box 848; recording and financial secretary, Wm. Enders, P. O. Box 848.

*No. 66, Houston, Tex.—Meets first and third Wednesdays at Labor Hall, corner Preston and Caroline streets. President, J. H. Shipps, 1807 Congress avenue; recording secretary, A. A. Taylor, 1917 Milam st.; financial secretary, T. M. Flavin, 2601 Rannels avenue.

*No. 67, Quincy, Ill.—Meets second and fourth Thursday at Trade and Labor Hall, 619 Main street. President, L. S. Hull, 1815 Vermont street; recording secretary, F. G. Ernest, 828 Madison street; financial secretary, J. W. Redmond, 648 South Fourth street.

†No. 68, Denver, Colo.—Meets every Monday at 344 Charles Building. President, Geo. E. Winters; Box 614; recording secretary, Geo. G. Macy, Box 614; financial secretary, C. F. Oliver, Box 614.

†No. 69, Dallas, Tex.—Meets every Thursday night at Labor Temple, 401 Main street. President, L. D. Short, 224 Columbia avenue; recording secretary, R. P. Richards, 556 Elm street; financial secretary, O. C. Blanton, 232 Ross ave.

*No. 70, Cripple Creek, Colo.—Meets first and second Wednesday following the 10th of month at (first) 126 E. Bennett ave; (second) 210 Victor ave, Victor. President, F. C. Burford, Box 684; recording secretary, C. R. Douglas, Box 684; financial secretary, E. P. Steen, Box 684.

†No. 71, Lancaster, Pa.—Meets second and last Sunday in Central Labor Hall, S. Queen and Mifflin streets. President, James Brann, 315 W. James street; recording secretary, Simeon Suter, 321 East Frederick street; financial secretary, Wm. O'Connors, 446 South Christian street.

*No. 72, Waco, Tex.—Meets second and fourth Saturday nights at Labor Hall, Sixth and Franklin streets. President, J. W. Thagard, 1215 Baylor street; recording secretary, C. E. Smith, 414 Washington street; financial secretary, C. F. Marrs, 1215 Baylor street.

*No. 73, Spokane, Wash.—Meets every Monday at Central Labor Hall, First and Post streets. President, W. D. Nickson, 2608 Mallon avenue; recording secretary, J. B. Holland, 1610 Ide avenue; financial secretary, D. W. Eberlin, 2514 E. Sixth avenue.

*No. 74, Winona, Minn.—Meets first and third Thursdays at Electrical Workers' Hall, 67 East Third street. President, George Morrison, 510 Olmstead street; recording secretary, John P. Fromm, 467 East Fourth street; financial secretary, H. B. Kline, 510 Olmstead street.

†No. 75, Grand Rapids, Mich.—Meets first and third Thursdays at Trades and Labor Council Hall. President, C. Lawrence; recording secretary, Harry Carlin, 8 Lagrave street; financial secretary, Fred H. Wilcox, 217 Livingston street.

*No. 76, Tacoma, Wash.—Meets first and third Saturdays in Union Hall, 721 Commerce streets. President, A. M. Craig, South Fifty-eighth and O streets; recording secretary, J. E. Willis, 4121 Thomson avenue; financial secretary, C. A. Young, 4110 Yakima avenue.

†No. 77, Seattle, Wash.—Meets every Thursday at Musicians' Hall, 1420 Second avenue. President, John S. Wilson, 1818 Ninth avenue; recording secretary, Wm. Lambert; financial secretary, A. Gordon, 2724 Madison street.

†No. 78, Atlanta, Ga.—Meets Tuesday nights at Federation Hall, Forsythe and Marietta streets. President, M. L. Goodhart, Marietta street; recording secretary, E. Boone, Oakland County, Ga.; financial secretary, H. Ashbaugh, 81 South Pryor street.

†No. 79, Syracuse, N. Y.—Meets first and third Mondays at Myers' Hall, corner of East Genesee and Montgomery streets. President, Edward Gyatt, 115 Burnet avenue; recording secretary, Cornelius O'Connor, 508 Hawley avenue; financial secretary, Edward Greene, 132 Mary Alley.

*No. 80, Norfolk, Va.—Meets every Tuesday at I. B. E. W. Hall, 268 Main street. President, H. A. Brock, P. O. Box 232; recording secretary, J. H. T. Smith, P. O. Box 232; financial secretary, E. E. Mathews, P. O. Box 232.

*No. 81, Scranton, Pa.—Meets first and third Monday at Street Car Men's Hall, 22 Lackawana avenue. President, T. B. Sturdevant, 815 Cedar avenue; recording secretary, N. K. Shenck, 611 Deacon street; financial secretary, D. Lavery, 101 Spruce street.

*No. 82, Henderson, Ky.—Meets first and third Tuesdays in each month in Powers' Hall, First street. President, A. F. Braum, 827 Second street; recording secretary, H. B. Jones, 218 Green street; financial secretary, A. J. Quinn, 818 N. Elm street.

*No. 83, Milwaukee, Wis.—Meets every Friday at Lipp's Hall, corner Third and Prairie streets. President, J. R. Barry, 1328 Fon Du Lac avenue; recording secretary, O. A. Blackwood, 829 Franklin street; financial secretary, Nick Daleiden, 846 Thirty-third street.

*No. 84, Atlanta, Ga.—Meets every Wednesday in Atlanta Federated Trades Hall, 14½ North Forsyth street. President, John Pendley, East Atlanta P. O.; recording secretary, B. R. Megee, 161 W. Hunter street; financial secretary, Geo. W. Olwell, 222 East Fair street.

*No. 85, Sault Ste. Marie, Ontario, Can.—Meets every second and fourth Thursday at Turner Block, Queen and Brock streets, Northwest. President, R. C. Duffin, Sault Ste. Marie, Ont.; recording secretary, H. Lamberton, Sault Ste. Marie, West P. O.; financial secretary, R. B. Johnston, P. O. Box 470, Sault Ste. Marie, Ont.

†No. 86, Rochester, N. Y.—Meets every Monday at Electrical Workers' Hall, 80 State street. President, Gus Webber, 51 Carlton street; recording secretary, H. E. Erhardt, 15 Lamberton Park; financial secretary, W. A. Johnston, Hudson avenue.

†No. 87, Newark, N. J.—Meets every Friday at Electrical Workers' Hall, 236 Washington street. President, W. McDonald, 332 Bank street; recording secretary, J. Leger, 150 First street; financial secretary, F. R. Greenwood, 50 Clinton street.

*No. 88, Savannah, Ga.—Meets second and fourth Monday evenings at Odd Fellows Hall,

corner President and Whitaker streets. President, J. R. Dargon, Box 818; recording secretary, R. F. Stafford, Box 816; financial secretary, E. H. Todd, Box 816.

*No. 89, Akron, Ohio.—Meets every other Friday at 89 Viaduct. President, G. M. Swartz; recording secretary, F. F. Loomis; 111 Viaduct.

*No. 90, New Haven, Conn.—Meets every Saturday evening at Forester's Hall, 781 Chapel street. President, Frank Horan, 57 Washington avenue; recording secretary, J. J. Wheeler, 156 Congress avenue; financial secretary, Frank Tanner, 156 Congress avenue.

*No. 91, Easton, Pa.—Meets second and fourth Friday nights at Easton Journal Building, Church street. President, Alex. McNeill, 208 Northampton street; recording secretary, H. O. Meeker, 249 Bushkill street; financial secretary, W. C. Pearce, 40 Wilkesbarre street.

*No. 92, Hornellsville, N. Y.—Meets second and fourth Saturdays in each month at B. of R. T. Hall, Arcade Building. President, H. S. Brown, Hornellsville Tel. Co.; recording secretary, A. E. Kline, Hornellsville Tel. Co.; financial secretary, R. Burdick, 9 Cottage avenue.

*No. 93, East Liverpool, O.—Meets every Wednesday night, in Smith-Fowler Building, on Diamond. President, H. Hetzel, corner Robinson and Walnut streets; recording secretary, S. G. Cowles, P. O. Box 382; financial secretary, R. C. Baxter, 178 Monroe streets.

*No. 94, Newance, Ill.—Meets second and fourth Saturday nights each month at Federation of Labor Hall. President, E. W. Kramer, 618 East second street; recording and financial secretary, K. W. Filaley, 404 Rice street.

*No. 95, Joplin, Mo.—Meets every Thursday night at Labor Hall, Sixth and Wall streets. President, L. L. Haggard, 508 Amanda avenue; financial secretary, Chas. Nelson, Box 461.

*No. 96, Worcester, Mass.—Meets every Monday at Piper Hall, 419 Main street. President, W. D. Kendall, 5 Kendall Place; recording secretary, E. J. Murphy, 419 Main street; financial secretary, S. A. Strout, 419 Main street.

*No. 97, Mt. Vernon, O.—Meets every first and third Saturday night, at Quindaro, I. O. O. F. Hall, South Main street. President, F. D. Morrison, Mt. Vernon, Ohio; recording secretary, J. C. Jacobs, Mt. Vernon, Ohio; financial secretary, O. D. Layman, Ridgewood avenue.

*No. 98, Philadelphia, Pa.—Meets every Tuesday night at Elks' Hall, 282 N. Ninth street. President, G. Coleman; recording secretary, F. Peterson; financial secretary, Jas. S. Meade, 1821 Arch street.

*No. 99, Providence, R. I.—Meets every Monday night at Hanley Hall, 68 Washington street. President, A. W. Seavey, No. 1 Falcon street; recording secretary, R. A. Ripley, 1 North Court street; financial secretary, Rowland Alford, 118 Vandewater street.

*No. 100, Jacksonville, Fla.—Meets Thursdays at B. T. C. Hall, Bay street. President, G. B. Lampkin, General Delivery; recording secretary, I. E. Salehwell, 740 W. Monroe street; E. J. McDonnell, 702 W. Adams street.

*No. 101, Middletown, N. Y.—Meets second and third Thursdays, in Times building, King and Center streets. President, John Ayres, Central Building, North street; recording secretary, J. V. Callaghan, 37 Beattie, avenue; financial secretary, B. F. Giveans, 10 Washington street.

*No. 102, Paterson, N. J.—Meets every Thursday evening at Helvetia Hall, 56 Van Houten street. President, Frank H. Hopper, 50 Haledon avenue; recording secretary, N. Merrick, 74 Bloomfield avenue; financial secretary, R. Clark, 37 Benson street.

*No. 103, Boston, Mass.—Meets every Wednesday at Dexter Hall, 987 Washington street. President, R. H. Bradford, 987 Washington street; recording secretary, S. E. Sanborn, 608 East second street, South Boston; financial secretary, J. W. Barton, 126 Cherry street, Chelsea, Mass.

*No. 104, Boston, Mass.—Meets every Tuesday at Appleton Hall, 9 Appleton street. President, William R. Reid, 1486 Columbus avenue; recording secretary, John A. McInnis, 23 Oak Grove Terrace, Roxbury, Mass.; financial secretary,

Leod MacLeod, 8 Lincoln street, E. Somerville, Mass.

*No. 105, Hamilton, Ont.—Meets second and fourth Thursday at Trades and Labor Hall, 17 Main street, East. President, Alex. Tongie, 21 Grove street; recording secretary, W. J. Griffith, 266 Catharine street, north; financial secretary, Joseph Cullif, Kinsade avenue.

*No. 106, Jamestown, N. Y.—Meets Monday evening at Warner Block, Room 9, second floor. President, W. J. Bell, Hotel Ellicott; recording secretary, George H. Leburg, 802 East Second street; financial secretary, Wm. J. Torrey, 44 Park street, Jamestown, N. Y.

*No. 107, Pittsburg, Mass.—Meets every Tuesday at Schiellerbine Hall, Sixth and Broadway. President, Thomas Frew, 608 E. Seventh street; recording secretary, Rex Camblin; general delivery; financial secretary, Paul Mattingly, care Home Telephone Co.

*No. 108, Tampa, Fla.—Meets every Wednesday night at Carpenter's Hall, Cor. Franklin and Fortune streets. President, A. W. Carter, 1808 Lamar street; recording secretary, W. M. Baker, P. O. Tampa, Fla.; financial secretary, M. U. Smith, 708 Jackson street.

*No. 109, Davenport, Iowa.—Meets every Thursday night at Danish Brotherhood hall, 607-609 West Fourth streets. President, Clifton Perry, 528 Brady street; recording secretary, C. U. Chase, 513 Warren street; financial secretary, Jas. Daltner, 202 East Fifth street.

*No. 110, Sandusky, Ohio.—Meets first and third Friday nights at Fusch's Hall, corner of Monroe and Fulton streets. President, C. McNeal, Jefferson street; recording secretary, Wm. Windisch, 506 Pearl street; financial secretary, Chas. Littleton, 821 Scott street.

*No. 111, Honolulu, Hawaii.—Meets first and third Thursdays at 7.30 p. m., Brooklyn Hall, Alaken between Queen and Merchant streets. President, E. F. Dunn; recording secretary, E. P. Hartfield; financial secretary, M. Oleson, Box 144.

*No. 112, Louisville, Ky.—Meets every Tuesday night at Germania Hall, 107 W. Jefferson street. President, Neal Coopridge, 2718 W. Madison st. recording secretary, H. W. Rowlett, R. F. D. 2; financial secretary, F. H. Weaver, 738 Washington street.

*No. 113, Colorado Springs, Colo.—Meets every Friday, 122 Cucharras street. President, Jas. English, 5 E. Moreno street; recording secretary, Wm. Waldron, 122 E. Cucharras street, financial secretary, H. T. Paschal, P. O. box 1067.

*No. 114, Toronto, Can.—Meets first and third Wednesdays at Temple Building, corner Bay and Richmond streets. President, W. J. Middleton, F. Shaftsbury avenue; recording secretary, W. 18 Partello, 24 Louisa street; financial secretary, G. C. Beckett, 61 Duke street.

*No. 115, Austin, Tex.—Meets second and fourth Wednesdays at Trades Council Hall, over 1000 Cong. avenue. President, Geo. E. Felter, 110 W. avenue; recording secretary, E. D. Bralley, 509 Long ave.; financial secretary, B. B. Beard, 907 E. Third street.

*No. 116, Los Angeles, Cal.—Meets every Tuesday at Brents Hall, 544 1/2 South Spring street. President, M. S. Culver, 1848 N. Grand avenue; recording secretary, E. Powelson, Station B; financial secretary, H. M. Scott, 2436 Wabash avenue.

*No. 117, Elgin, Ill.—Meets first and third Thursday, at Trades Council Hall, 102 Douglas avenue. President, I. C. Burney, 816 North Crystal street; recording secretary, T. H. Bryson, 54 Walnut avenue; financial secretary, D. J. Lee, 120 Grove avenue.

*No. 118, Dayton, O.—Meets Tuesday each week at Delster Post Hall, 25 N. Main street. President, C. Y. Sohnes, 112 Leonard street; recording secretary, E. W. Wysong, 871 N. Main street; financial secretary, C. M. Rike, 568 W. Fourth street.

*No. 119, Bluefield, W. Va.—President, B. Jones; financial secretary, Geo. Dodds.

*No. 120, London, Ont.—Meets third Tuesday in each month at Oriental Hall, Clarence street. President, G. Upshall, 569 William street; recording secretary, L. R. Foley, 189 Wellington street; financial secretary, G. H. Porter, box 885.

Aug 1904

STATISTICS

†No. 121, Denver, Col.—Meets every Wednesday at Charles Bldg., room 825, Fifteenth and Curtis streets. President, B. P. Kernohan, 2251 Welton street; recording secretary, Fred Fryer, 1627 S. Emerson street; financial secretary, S. H. Phillips, 1627 S. Emerson street.

*No. 122, Great Falls, Mont.—Meets Monday at Phelps Building, corner Third street and Central avenue. President, F. D. Warde, Box 885; recording secretary, A. N. Thomas, Box 885; financial secretary, E. W. Frost, Box 885.

*No. 123, Wilmington, N. C.—Meets every Thursday at Allied Union Hall, over Atlantic National Bank. President, I. S. King, gen. delivery; recording and financial secretary, E. C. Yarbrough, over Atlantic National Bank.

*No. 124, Galveston, Tex.—Meets second and fourth Fridays at Cooks' and Walters' Hall, 307½ Tremont street. President, Jos. Cohen, 15 Post Office street; recording secretary, Ed. F. Parks, Atlanta Hotel; financial secretary, John A. Rotter, 88th street between M and M½.

*No. 125, Portland, Ore.—Meets every Wednesday at Painters' Hall, No. 284½ Morrison street. President, Wm. Morris, 68 Seventh street; recording secretary, C. F. Canfield, 447 E. Davis street; financial secretary, Willis A. Rowe, 349 Couch street.

†No. 126, Little Rock, Ark.—Meets first and third Tuesday, in month at Labor Temple, Second and Main streets. President, J. H. Byers, 112 N. Cross street; recording secretary, T. W. Hollin, 600 E. 15th street; financial secretary, E. M. Perkins, 917 North street.

†No. 127, New Rochelle, N. Y.—Meets second and last Friday in each month at Zippnick Hall, No. 10 Mechanic street. President, R. K. Johnson, No. 8 Lawton street; recording secretary, John Hughes, 8 Lawton street; financial secretary, H. B. Miller, 47 Guion Place.

*No. 128, Alton, Ill.—Meets every first and third Fridays at Electrical Workers Hall, 325 State street. President, Albert Foster, 607 Easton street; recording secretary, Joe White, 618 State street; financial secretary, W. H. Reed, 40½ B East Eighth streets.

*No. 129, Nashville, Tenn.—Meets every Saturday night at Labor Advocate Hall. President, C. Snider, 301 Church street; recording secretary, D. R. Johnson, 301 Church street.

†No. 130, New Orleans, La.—Meets every Thursday at 7 p. m., at Carpenter's Hall, St. Charles street near Paydrass. President, W. F. Ragan, 2210 Beenvill street; recording secretary, W. M. Fisher, 615 Third street; financial secretary, H. W. Thomas, 5238 Constance street.

†No. 131, Traverse City, Mich.—Meets second and fourth Tuesdays in month in Montague Hall, 127 E. Front street. President, A. Tolhurst, 823 W. Eleventh street; recording secretary, L. V. Beattie, 1011 E. Front street; financial secretary, Frank Alvord, 814 S. Division street.

†No. 132, South Bend, Ind.—Meets every two weeks on Monday evenings at Central Labor Hall, South Michigan street. President, Geo. N. Bams, 886 N. Main street; recording secretary, Wm. F. Qualls, Home Tel. Co.; financial secretary, N. J. Shoemaker, P. O. Box 808.

†No. 133, Detroit, Mich.—Meets every Wednesday night at Johnston's Hall, 84 Munroe avenue. President, F. W. Raymond, 550 Baker street; recording secretary, R. Lindsay, 242 Hubbard avenue; financial secretary, W. F. Tewksbury, 274 Porter street.

†No. 134, Chicago, Ill.—Meets every Thursday night at 196 East Washington street. President, Chas. L. White, 934 Monticello avenue; recording secretary, George O. Johnson, 196 Washington street; financial secretary, J. B. Wilson, 102 Franklin street.

*No. 135, La Crosse, Wis.—Meets every second and last Wednesday of each month at Bartle's Hall, Jay street, bet. Fourth and Fifth. President, Ben. A. Emerton, 333 North Ninth street; recording and financial secretary, J. L. Christie, 614 S. Fifth street.

†No. 136, Birmingham, Ala.—Meets every Friday night at Labor Temple, Twenty-first. President, T. O. James, Woodward Building; recording secretary, R. S. Hoke, 322 63rd street, Woodlawn;

financial secretary, J. E. B. Vincent, 2119 Third ave.

*No. 137, Albany, N. Y.—Meets second and fourth Fridays at Beaver Hall, Beaver Block, Pearl street near Beaver. President, Benj. B. Smith, 270 Washington avenue; recording secretary, James Crook, 178 Livingston avenue; financial secretary, G. D. Marmom, 238 N. Pearl street.

*No. 138, Fort Wayne, Ind.—Meets second and fourth Thursday evenings at K. of L. Hall, Court street. President, P. B. Merz, 511 Holman street; recording secretary, Fred Stark, 127 E. Washington street; financial secretary, D. Mullen, 200 N. Barr street.

*No. 139, Elmira, N. Y.—Meets second and fourth Sundays at Federation of Labor Hall, 332 Carroll street. President, Benj. R. Phillips, 818 E. Second street; recording secretary, John Marvin, 609 East Church street; financial secretary, J. K. Packard, 872 West Fifth street.

*No. 140, Schenectady, N. Y.—Meets first and third Wednesdays at Carpenter's Hall, State street near Bridge. President, John H. Reed, 439 S. Center street; recording secretary, W. E. Crosby, 17-19 S. Center street; financial secretary, J. J. Dowling, corner Clinton ave. and Northern Boulevard, Albany, N. Y.

†No. 141, Wheeling, W. Va.—Meets every Friday night at Peabody Building, Room 207, Market street, between Eleventh and Twelfth streets. President, Oscar Whitecotton, 87 Seventeenth street; recording secretary, Edward Shafer, 35 New Jersey street; financial secretary, L. E. Feldman, 812 Market street.

†No. 142, Wheeling, W. Va.—Meets every Wednesday at I. B. E. W. Hall, Room 207 Peabody Building. President, W. T. McKee, 1203 Eoff street; recording secretary, Geo. Wey, Edgington Lane; financial secretary, W. A. Kent, 1412 Market street.

*No. 143, Ashtabula, O.—Meets second and fourth Mondays, at C. L. U. Hall, Newbury Block, corner Main and Center streets. President, S. D. Eckler, 15 Tyler avenue; recording secretary, C. A. Amy, 17 Sycamore street; financial secretary, O. Myers, care Ashtabula Tel. Co.

*No. 144, Wichita, Kan.—Meets every Thursday night at Red Men's Hall, 400 East Douglas. President, T. L. Roberts, 314 N. Hydraulic street; recording secretary, Phillip F. Kennie, care Western Union; financial secretary, S. C. Pratt, 710 S. Market street.

*No. 145, Saginaw, Mich.—Meets Wednesday night at Engineer's Hall, 218 Genesee avenue. President, J. Crandall, 1103 S. Warren avenue; recording secretary, F. Smith, 923 Jackson street; financial secretary, C. Hillman, 816 S. Baum st.

*No. 146, Bridgeport, Conn.—Meets Wednesday of each week at Royal Arcanum Hall, 1106 Main street. President, J. T. Rooney, P. O. box 623; recording secretary, J. W. Peck, P. O. box 623; financial secretary, Michael McMahon, 367 Main street.

*No. 147, Anderson, Ind.—Meets every Friday night at Bricklayer's Hall, 909 Main street. President, H. C. Minor, care D. & M. Tel. Co.; recording secretary, F. Hess, D. & M. Tel. Co.; financial secretary, H. C. Minor, 623 Twelfth st.

†No. 148, Washington, D. C.—Meets every Wednesday night at Union Hall, 430 Eighth street, N. W. President, W. J. Fish, 1001 E street, S. W.; recording secretary, C. C. Moberly, 1001 E street, S. W.; financial secretary, M. V. Murphy, 808 Fifth street, N. E.

*No. 149, Aurora, Ill.—Meets second and fourth Tuesdays at Trade's Assembly Hall, on Island. President, Robert Gilmore, 228 S. Broadway; recording secretary, E. A. Wood, 218 Benton street; financial secretary, R. J. Gilmore, 886 South street.

*No. 150, Bay City, Mich.—Meets second and fourth Tuesdays at A. O. U. W. Hall, corner Center and Adams streets. President, Jas. Hodgins, 1817 Eleventh street; recording secretary, W. D. Parker, Essexville, Bay County, Mich.; financial secretary, Charles Crampton, City Hall, Bay City, Mich.

†No. 151, San Francisco, Cal.—Meets every Tuesday at Electrician's Hall, 35 Eddy street. Pres-

ident, T. R. Elliott, 338 Minna street; recording secretary, C. H. Hanson, 108 1/2 Fell street; financial secretary, James C. Kelly, 50 Webster street.

*No. 152, Ft. Scott, Kan.—Meets first and third Thursdays at Painters' Hall, 201 Market street. President, J. D. Runkle, 520 N. National avenue; recording secretary, J. E. White, 529 N. National avenue; financial secretary, S. P. Armstrong, 110 N. Judson street.

*No. 153, Marion, Ind.—Meets every Tuesday at Riley Hall, northwest corner Third and Washington streets. President, J. A. Ingalls, 817 West Eighth street; recording secretary, Ray Johnson, 606 South Boots street; financial secretary, Howard C. LaFollette, Third and Baldwin avenues.

*No. 154, Rock Island, Ill.—Meets first and third Thursdays at Turner Hall, 1520 Third avenue. President, A. Ballard, 1217 1/2 street, Moline, Ill.; recording secretary, C. S. Wangelin, 1523 Ninth avenue; financial secretary, A. Coe, 923 Fourth avenue.

*No. 155, Oklahoma City, O. T.—Meets every Wednesday night at No. 4 West California street. President, J. M. Brown, 816 W. Chocata street; recording secretary, C. F. Blocher, Mo. and Kan. Tel. Co.; financial secretary, J. C. Clark, 1020 West First street.

*No. 156, Ft. Worth, Tex.—Meets every Wednesday night at B. T. C. Hall, 210 Main street, third floor, Powell Building. President, Frank Swo, care Kane the electrician; recording secretary, Lee Stephens, 602 West First street; financial secretary, J. W. Wilkinson, 1202 Main street.

*No. 157, Elkhart, Ind.—Meets first and third Thursday of every month, Central Labor Hall, corner Main and Franklin streets. President, L. D. Whittig, Prairie street; recording secretary, Fred. Livingston, Box 265; financial secretary, Asa Kintaler, R. F. D. No. 1.

*No. 158, Temple, Tex.—Meets every Wednesday night, Electrical Worker's Hall, Cor. First and Avenue A. President, Guy Briant, P. O. Box 335; recording secretary, H. S. Newland, 506 S. Eleventh street; financial secretary F. J. Hewitt, P. O. Box 335.

*No. 159, Madison, Wis.—Meets second and fourth Thursdays of each month, Labor Hall, State street. President, John H. Bourne, 343 West Doty street; recording secretary, E. J. Winsor, 1149 East Gorham street; financial secretary, Fred Ingram, 530 West Doty street.

*No. 160, Zanesville, O.—Meets first and third Tuesday at 7.30 p. m., at Building Trades Hall, over 205 Main street. President, F. J. Poyner, 5 Bell Flats; recording secretary, John Mangin, Kirk House; financial secretary, A. E. DeLong, Route 8, Zanesville.

*No. 161, Uniontown, Pa.—Meets first and third Fridays at Trades and Labor Council Hall, Main street. President, Jas. Riffe, Uniontown, Pa.; recording secretary, J. F. Morrow, No. 9 Commercial street; financial secretary, W. L. Lacey, 28 Wilson avenue.

*No. 162, Omaha, Neb.—Meets every Thursday evening, at Labor Temple, Fifteenth and Dodge streets. President, J. P. Hannaher, Labor Temple; recording secretary, B. H. Limenberger, Labor Temple; financial secretary, J. C. Grimm, Labor Temple.

*No. 163, Wilkesbarre, Pa.—Meets second and fourth Mondays at Building Trades Council Hall, 81 West Market street. President, A. F. Lynch, 149 Coal street; recording secretary, J. J. McGlynn, 390 East South street; financial secretary, D. H. Ebert, 400 Scott street.

*No. 164, Jersey City, N. J.—Meets Monday, Fehren's Hall, 168 Beacon avenue. President, J. A. Brennan, 1304 Washington street, Hoboken; recording secretary, Otto Bauer, 187 Griffith street; financial secretary, Edward F. Kenna, 1119 Washington street, Hoboken N. J.

*No. 165, Newport News, Va.—Meets Tuesdays at Thirty-second street and Washington ave. President, J. W. Driver, 1014 Twent-fifth st.; recording secretary, C. D. Frayser, 290 Twenty-seventh street; financial secretary, R. A. Jordan, 2 Bailey street, Hampton, Va.

*No. 166, Winnipeg, Manitoba, Can.—Meets second and fourth Thursdays at Trades Hall, corner Market and Main. President, H. Lamberton; recording secretary, J. S. Milne, 647 Elgin ave.; financial secretary, W. Girard, 118 Hallett st.

*No. 167, Pittsfield, Mass.—Meets first and third Wednesdays at Old England Block, North street. President, Fred A. Wood, 51 Briggs ave.; recording secretary, J. G. Crown, 81 Maplewood ave.; financial secretary, I. G. King, 84 Parker street.

*No. 168, Parkersburg, W. Va.—Meets Wednesdays at Bricklayers' Hall, Court Square. President, G. T. Henderson, Williamstown, W. Va.; recording secretary, J. R. Mayhew, Avery street; financial secretary, W. C. Vaughan, 1017 Lynn street.

*No. 169, Fresno, Cal.—Meets every Monday at Union Hall, 1123 K street. President, A. L. Moore, 940 H street; recording secretary, H. F. White, 2029 Fresno street; financial secretary, C. T. McShany, Box 1801.

*No. 170, Mason City, Iowa.—Meets first and third Thursday evenings at Howe's Hall cor. Fourth and Main streets. President, A. H. Ramsey, 216 South Washington street; recording secretary, F. W. Roberts, 214 East Tenth street; financial secretary, J. D. Templin, 771 East State street.

*No. 171, Ann Arbor, Mich.—Meets first and third Saturdays at Trades Council Hall, South Main street. President, Geo. F. Haggitt, 13 River st., Ypsilanti; recording secretary, Foster Ostrander, Ypsilanti; financial secretary, F. C. Phelps, 114 Felch street.

*No. 172, Newark, Ohio.—Meets every Friday night at I. B. E. W. Hall, 11 1/2 E. Church street. President, L. A. Slack, Citizens' Tel. Co.; recording secretary, Sam. C. Alledori, 81 Ninth street; financial secretary, D. S. Hollister, 405 Andover street.

*No. 173, Ottumwa, Iowa.—Meets second and fourth Wednesdays at Labor Hall, East Second street. President, K. C. Carruthers, S. Ottumwa; recording secretary, S. W. Speer, 917 E. Main street; financial secretary, T. Tracy, 549 W. Main street.

*No. 174, St. Johns, N. B.—Meets first and third Wednesdays at Berryman's Hall, corner Princess and Charlotte streets. President, D. H. Melvin, 57 High street; recording secretary, John W. Mathison, 11 Metcalfe street; financial secretary, Oltis H. Tracy, 88 Cliff street.

*No. 175, Benton Harbor, Mich.—Meets every Wednesday, Robinson Block, 110 Pipestone street. President, R. G. Moats, 126 Summit street; recording secretary, R. Emerson, 618 Broad street, St. Joseph, Mich.; financial secretary, C. C. Maddox.

*No. 176, Joliet, Ill.—Meets every Wednesday at Labor Hall, Jefferson and Ottawa street. President, Ray Allen, 425 Chicago street; recording secretary, A. J. Scheuber, 219 N. Broadway; financial secretary, Denny Wright, 401 Chicago street.

*No. 177, Paducah, Ky.—Meets Second and fourth Mondays at Central Labor Hall, corner of Seventh and Court streets. President, J. Farmer, 427 Clark street; recording secretary, Ed. Juett, care People's Tel. Co.; financial secretary, H. C. Rawling, 427 Clark street.

*No. 178, Canton, Ohio.—Meets first and third Wednesday at Brown's Hall, 1409 West Tusc street; President, H. R. Williams, 1118 West Eighth street; recording secretary, W. B. Thayer, 808 Lawrence avenue; financial secretary, H. T. Seymour, 1409 West Tusc street.

*No. 179, Charleston S. C.—Meets every second and fourth Friday at Turnverein Hall, 261 and 263 Meeting street. President, C. J. Albers, 19 Anson st.; recording secretary, J. J. Burns, 154 Meeting street; financial secretary, Samuel Webb, 141 Meeting street.

*No. 180, Vallejo, Cal.—Meets first and third Friday at Labor Council Hall, Sacramento street. President, H. U. Jacobs; recording and financial secretary, R. M. Plunkett, 230 York street.

*No. 181, Utica, N. Y.—Meets third Tuesday at Labor Temple, Hotel street, Utica, New York.

President, John Greenwood, 82 Roberts street; recording secretary, Herman Wameling, 247 Seymour avenue; financial secretary, Edward T. Fox, 199 Court street.

*No. 182, La Cananea, Sonora, Mex.—Meets every Monday evening, 8.00, at Y. M. C. A. President, A. C. Brown, La Cananea, Sonora; recording secretary, Sid Carles, La Cananea, Sonora; financial secretary, O. P. Gray, La Cananea Sonora.

*No. 183, Lexington, Ky.—Meets second and fourth Tuesday nights at Vanderen Hall, West Main street, third door east of Broadway. President, R. T. De Moss, 122 Brand avenue; recording secretary, Smith Parks, 248 East Main st.; financial secretary, O. M. Wynheir, 557 East third street.

*No. 184, Galesburg, Ill.—Meets first and third Wednesdays of every month at Trades Assembly Hall, corner Main and Boone avenue. President, J. H. Shull, 268 Duffield avenue; recording secretary, Roy Squires; financial secretary, John Norwood, 149 E. Brooks street.

*No. 185, Helena, Mont.—Meets first and third Saturdays at 8 p. m. in Electrical Workers Hall, Main street. President, Arthur C. Probst, P. O. Box, 267; recording secretary, Alex. Jones, P. O. Box 267; financial secretary, F. F. Clark, P. O. Box 267.

*No. 186, Hartford, Conn.—Meets every Tuesday at Union Painters' Hall, 235 Asylum street. President, W. H. Amos, 32 Church street; recording secretary, J. P. Rohan, 41 Deam street; financial secretary, Wm. J. Goltra, 106½ Trumbull street.

*No. 187, Oshkosh, Wis.—Meets every Tuesday night at Stationary Engineers' Hall, cor. State and Otter streets. President, P. S. Bixby, 140 Pearl street; recording secretary, J. E. Niederhe 97 Harvey street; financial secretary, Robert Waters, 187 Wangoo street.

*No. 188, Dallas, Tex.—Meets every Wednesday at Labor Hall, Elmand Scotland Court. President, E. A. White, 182 N. Akard; recording secretary, B. E. Loper, 269 Cochran street; financial secretary, Chas. Bush, 311 Wood street.

*No. 189, Chester, Pa.—Meets every Monday night at Beale Block, Sixth and Edgemont ave. President, John F. Owens, Chester; recording secretary, John Lamont, 123 Concord avenue; financial secretary, Andrew Sullivan, Chester.

*No. 190, Newark, N. J.—Meets second and fourth Thursdays at Electrical Workers Hall, 238 Washington street. President, John C. Brennen, 864 New street; recording secretary, Wm. Varley, 250 Clifton avenue; financial secretary, Joseph R. Hoch, 864 New street.

*No. 191, Everett, Wash.—Meets every Thursday night at Labor Temple, 2820 Lombard street. President, Severn Patterson, 3004 Federal street; recording secretary, W. H. Riggs, 8209 Oak ave.; financial secretary, L. V. Harper, P. O. Box 228.

*No. 192, Memphis, Tenn.—Meets every Tuesday at United Labor Temple, 354 Second street. President, Geo. A. Hulbert, 148 Adams street; recording secretary, Frank Underwood, 148 Adams street; financial secretary, G. L. Hamilton, 148 Adams street.

*No. 193, Springfield, Ill.—Meets every Tuesday at I. B. E. W. Hall, 210½ S. Fifth street. President, B. U. Spears, General Delivery; recording secretary, G. F. Anderson, 548 West Canady st.; financial secretary, W. E. Oliver, 222 W. Fifth st.

*No. 194, Shreveport, La.—Meets every Tuesday night at Labor Hall, corner of Texas and Common streets. President, W. A. Holt, 1107 Reynolds street; recording secretary, S. E. Blodgett, Arcade Hotel; financial secretary, R. L. Curtis, 823 Walnut street.

*No. 195, Salt Lake City, Utah—Meets Sundays at 10 a. m., in Jennings Block, First, South and Main street. President, George W. Setell, No. 4 Cliff Place; recording secretary, E. L. Nourse, Hotel Richelleu, Second So. and Third, East; financial secretary, J. E. Gillett, 176½ W. South Temple.

*No. 196, Rockford, Ill.—Meets first and third Fridays at Electrical Workers Hall, 309½ West State street. President, Clarence Bennett, 414 S. Madison street; recording secretary, Harry J.

Miller, 534 Woodlawn ave.; financial secretary, L. C. William-son, 523 W. State street.

*No. 197, Bloomington Ill.—Meets every Friday at Electrical Workers' Hall, over 108 West Front street. President, J. J. Eversole, P. O. Box 274; recording secretary, C. J. Winters, P. O. Box 274; financial secretary, W. S. Briscoe, Box 286.

*No. 198, Dubuque, Iowa.—Meets second and fourth Wednesdays at Facade Building, Room 1. President, F. Chalder, 57 Grand View ave.; recording secretary, Ed A. Peters, care of St. George Hotel; financial secretary, J. N. Krah, Lock Box 103.

*No. 199 St. Louis, Mo.—Meets Thursday at 8 p. m., Union Hall, northeast corner Eleventh and Chestnut st. President, T. F. Lappin, 4058 Connecticut street; recording secretary, H. J. Matthews, 3009 Manchester avenue; financial secretary, W. J. Kelley, 2914 Madison street.

*No. 200, Anaconda, Mont.—Meets first and third Tuesdays, Mattie Block, East Commercial avenue. President, Walter Hurst, P. O. Box 483; recording secretary, Jas. O'Mara, P. O. Box 483; financial secretary, J. H. Davis, P. O. Box 483.

*No. 201, Appleton, Wis.—Meets first and third Tuesday of each month at Master Builders' Hall, corner Edward and Appleton streets. President, John Tempas, 1024 Sixth street; recording secretary, Wm. F. Kerns, 805 N. Division street; financial secretary, Robt. W. McGillan, 1019 Fifth street.

*No. 202, Seattle, Wash.—Meets second Tuesday of every month in Hotel Seattle Building, Occidental avenue and Yesler street. President, J. Horning, East Lake avenue and Gaylor street; recording secretary, Gus Soderberg, Eighth avenue and Pike street; financial secretary, L. H. Brickley, 314½ Ninth avenue, North.

*No. 203, Champaign, Ill.—Meets every Tuesday night, at Odd Fellows Building, 7 and 9 Neil street. President, H. G. Eastman, 408 North Elm street; recording secretary, John C. McDonald, 1108 West Clark street, Urbana, Ill.; financial secretary, A. L. Chandler, 717 N. Randolph street.

*No. 204, Springfield, Ohio.—Meets every Monday at Trades and Labor Hall, Main street and Walnut alley. President, Freeman S. Durling, rear of 139 W. Main street; recording secretary, David Fifer, 85 E. Pleasant street; financial secretary, P. F. Dye, 17 N. Factory street.

*No. 205, Jackson, Mich.—Meets first and third Tuesday at Labor Hall, corner Jackson and West Main streets. President, E. Osborn, 511 North Jackson street; recording secretary, Wm. Lawrence, 316 Greenwood avenue; financial secretary, F. C. Lewis, 427 W. Wilkins street.

*No. 206, Hamilton, Ohio.—Meets every Monday night at Monument Hall, High and River streets. President, R. Hall, Sixth and Sycamore streets; recording secretary, A. Hickman; financial secretary, Wm. Line, 317 North Eleventh street.

*No. 207, Stockton, Cal.—Meets every Tuesday, at Turner Hall, 110 North Hunter street. President, W. L. Muttich, 28 South Hunter street; recording secretary, P. H. Pendleton, 1595 California street; financial secretary, W. E. Lee, Belmont Hotel.

*No. 208, Muscatine, Iowa.—Meets second and fourth Fridays of each month at Trades and Labor Assembly Hall, 105-107 Iowa avenue. President, David P. Patterson, 412 W. Sixth street; recording secretary, J. A. Lawrence, 1617 Mulberry street; financial secretary, W. F. Demorest, 208 East Second street.

*No. 209, Logansport, Ind.—Meets every Thursday at 7.30 p. m., in Washington Hall, corner Third and Broadway. President, W. D. Brown, 708 Chicago st.; recording secretary, Lee Henry, 319½ Third st.; financial secretary, N. Costenborder, 320 Race st.

*No. 210, Atlantic City, N. J.—Meets every Wednesday night at Odd Fellows Hall, S. New York avenue. President, Geo. A. Orr, 189 Mt. Vernon avenue; recording secretary, I. N. Cramer, rear 12 South Ohio ave.; financial secretary, C. H. Towne, 1515 Pacific ave.

*No. 211, Atlantic City, N. J.—Meets every Friday night in G. A. R. Hall, S. New York avenue.

President, Harry D. Brown, 1806 Ontario ave.; recording and financial secretary, E. W. McCann, Alcazar.

†No. 212, Cincinnati, O.—Meets every Wednesday at Cosmopolitan Hall, 1818 Vine street. President, Thomas Higgins, 229 Sixth avenue, Dayton, Ky.; recording secretary, Harry Falquet, 505 Ward avenue, Bellevue Ky.; financial secretary, Joseph A. Cullen, 952 West Sixth street, Cincinnati, Ohio.

*No. 213, Vancouver, B. C.—Meets second and fourth Thursdays, Room 3, Ingleside Block, Cambie street. President, J. A. Dillabough, 808 Howestreet; recording secretary, Geo. P. Farr, Room 3, Ingleside Block; financial secretary, G. H. Sellars, Room 3, Ingleside Block.

*No. 214, Olean, N. Y.—Meets every Friday at Fountain House, First street. President, E. R. Klamt, N. Fifteenth street; secretary F. E. Dellinger, 121 South Twelfth street.

*No. 215, Hot Springs, Ark.—Meets every Tuesday night, rear of Plateau Hotel, Chapel street. President, W. B. Subrick, Lone Star Hotel; recording secretary, E. C. Walte, Gen'l Del.; financial secretary, G. E. Tracy, 112 Olive street.

*No. 216, Owensboro, Ky.—Meets every Tuesday at Main and St. Elizabeth streets. President, A. D. Faught, 826 St. Elizabeth street; recording secretary, J. H. Carnell, 424 St. Ann street; financial secretary, H. A. Leisher, 117 Frederica street.

†No. 217, Seattle Wash.—Meets Mondays at Masonic Temple, Second and Pike streets. President, Chas. Crickmore, 928 85th avenue; recording secretary, Ed. Lemon, 1928 5th avenue; financial secretary, W. W. Morgan, 450 6th avenue.

*No. 218, Sharon, Pa.—Meets every alternate Friday night at Grimm Hall, West State street. President, C. D. Brown, Hubbard, Ohio; recording secretary, Chas. Ault, Rankin House; financial secretary, R. D. Hilliard, Box 80.

*No. 219, Sullivan, Ind.—Meets first and third Tuesday night at Electric Plant Building. President, S. M. Riggs; recording secretary, J. E. Stanfield, Sullivan, Ind.; financial secretary, N. S. Worley.

†No. 220, Rochester, N. Y.—Meets first and third Tuesdays in month at Durand Building, West Main street. President, P. J. Cotter, 98 Ontario street; recording secretary, C. H. Thompson, 25½ Ontario street; financial secretary, E. C. Thompson, 14, 435 Main street east.

†No. 221, Beaumont, Tex.—Meets every Friday at Furey's Hall, on The Triangle. President, J. H. Cousins, 371 Cypress street; recording secretary, Geo. Mayo, 850 Cypress street; financial secretary, R. B. Delahunty, 2006 Railroad ave.

*No. 222, Lafayette, Ind.—Meets every Thursday at Brick Masons' Hall, Tenth and Main streets. President, F. E. Williams, 418 N. Fifth street; recording secretary, E. S. Klinker, 1615 Tippecanoe street; financial secretary, Walter Hawkins, 1621 Casson street.

†No. 223, Brockton, Mass.—Meets second and fourth Tuesdays, room 114 Arcade Building, 139 Main street. President, Chas. E. Cole, 416 School street, Whitman; recording secretary, Harry R. Allen, 46 Fuller street; financial secretary, Harry R. Allen, 46 Fuller street.

*No. 224, New Bedford, Mass.—Meets Friday in Weaver's Hall, 112 Williams street. President, Fred T. Roach, 594 Elm street; recording secretary, Harry H. Jason, 111 South Seventh street; financial secretary, William H. Curtis, 43 Wing street.

*No. 225, Topeka, Kans.—Meets every Wednesday at Trades' Assembly Hall, 711 Kansas avenue. President, C. H. Baxter, Crawford Flat No. 2; recording secretary, Paul Robinson, Ohio House; financial secretary, D. C. Platt, 502 Chandler street.

†No. 226, Cedar Rapids, Iowa—Meets first Thursday evening in each month at Federation Hall, cor. First avenue and Second street. President, L. J. Schranck; recording secretary, Frank Thomas, 125 F avenue, west; financial secretary, Alex Sampson, 521 Third ave.

†No. 227, Birmingham, Ala.—Meets every Wednesday night at Fox's Hall, Fourth avenue and 19th street. President, M. Hunnicutt,

1006 North Fifteenth street; recording secretary, Chas. T. Moses, Tenth avenue and Nineteenth street, North; financial secretary, Bell Tel. and Tel. Co.

*No. 228, Oil City, Pa.—Meets first and third Tuesdays at K. of P. Hall, Center and Elm streets. President, H. Bocel, 19 Grove avenue; recording secretary, W. A. Humes; financial secretary, J. W. Bullock, 318 Pine street.

*No. 229, Manchester, N. H.—Meets first Tuesday of each month at Building Trades Hall, 848 Elm street. President, W. P. Michie, Old City Hotel; recording secretary, Chas. W. Warner, 76 Sagamore street; financial secretary, R. Sheer, No. 9 C street.

*No. 230, Victoria, B. C.—Meets every third Friday at Labor Hall, corner Johnson and Douglas streets. President, E. Routh, 62 Government street; recording secretary, F. F. McKittrick, 145 Chatham street; financial secretary, E. C. Knight, 200 Douglas street.

†No. 231, Grand Rapids, Mich.—Meets second and fourth Friday evenings at Lincoln Club Rooms, 68-68 Pearl street. President, L. B. Denton, care G. R. Elec. Co.; recording secretary, V. L. Fausey, 570 S. East street; financial secretary, H. R. Erdmann, 449 Terrace avenue.

*No. 232, Schenectady, N. Y.—Second Friday of each month at Electrical Worker's Hall, corner State and Central street. President, William H. Purcell, 114 Union street; recording secretary, John Bourgeois, 76 Broadway; financial secretary, W. Edward Miles, 104 First avenue.

†No. 233, Colorado Springs, Colo.—Meets every Thursday at Building Laborers Hall, over 12 East Huerfano street. President, Jas. Fleming, P. O. Box 654; recording secretary, Robt. J. Clark, P. O. Box 654; financial secretary, F. M. Jahn, P. O. Box 654.

†No. 234, Schenectady, N. Y.—Meets second and fourth Saturdays in each month at Electrical Worker's Hall, cor. State and Center streets. President, J. L. Stockman, 123 Front street; recording secretary, Henry L. Rivers, 859 Carrie street; financial secretary, J. Finkenstien, 147 Clinton street.

†No. 235, Cincinnati, Ohio.—Meets Thursday at Joseph's Hall, Twelfth and Vine streets. President, F. Anderson, 509 Bakewell street, Covington, Ky.; recording secretary, C. Wormer, 2610 Halstead street; financial secretary, J. Early, 2019 Breen street.

*No. 236, Streator, Ill.—Meets first and third Monday nights at Casey's Hall, 107 East Main street. President, H. M. Griffith, N. Bloomington; recording secretary, Geo. Duffner, 514 W. Bridge street; financial secretary, J. A. Shuler, 309 East Bridge street.

*No. 237, Lorain, Ohio.—Meets every Thursday night at Wagner Hall, southeast corner E. Erie and Broadway. President, E. E. Falconer, 281 Gregg avenue; recording secretary, J. F. Smith, 323 Franklin street; financial secretary, A. C. Marsh, 440 Sixth street, Elyria, Ohio.

*No. 238, Asheville, N. C.—Meets every Saturday at C. L. U. Hall, 89 Patton avenue. President, Charles Hallingsworth, W. U. Telegraph Office; recording secretary, H. Smith, 145 Roberts st.; financial secretary, J. H. Graham, 140 Bailey st.

No. 239, Newark, N. J.—Electric fixture fitters, wiremen, and hangers—Meets first and third Thursday at Electrical Workers Hall, 238 Washington street. President, Wm. G. Scheussler, 241 Camden street; recording secretary, Harry Schnarr, 185 North Fourth street; financial secretary, Michael Tanenbaum, 104 Hunterdon st.

No. 240, Philadelphia, Pa.—Telephone.—Meets every Thursday at Electrical Workers' Hall, S. E. corner Darien and Vine streets. President, George D. Loudenslager, 1219 Jefferson street; recording secretary, John Boone, 2380 Coral st.; financial secretary, Wm. J. Gillin, Jr., 1532 N. Garnet street.

†No. 241, Dayton, Ohio.—Meets every Monday night at Palm Garden Hall, 315 South Jefferson street. President, Thomas E. Fisher, 54 Logan street; recording secretary, Harry Toot; 10 Hawken street; financial secretary, C. Reiter, 31 Rung street.

Aug. 1924

*No. 242, Decatur, Ill.—Meets every Friday night at Room 416, Powers' Building, cor. South Water and East Main streets. President, E. O. Baker, Room 16 Syndicate Block; recording secretary, Jno. Simon, 416 Powers Building; financial secretary, A. Frazier, 416 Powers Building.

*No. 243 Vincennes, Ind.—Meets every Wednesday night at Odd Fellows Building, corner Second and Broadway street. President, Louis Mominee, 516 South Third street; recording secretary, Edward Drunian, 1127 Perry street; financial secretary, C. F. Green, 621 North Seventh street.

†No. 244, East Mauch Chunk, Pa.—Meets first and third Sunday, 2 p. m., at Hess' Hall, Center street, between Fourth and Fifth. President, Wren Brown, East Mauch Chunk, Box 298; recording secretary, Anthony Armbruster, East Mauch Chunk, Box 292; financial secretary, J. P. Tracy, East Mauch Chunk, Box 195.

†No. 245, Toledo, O.—Meets every Friday night at Mulcaheys Hall, 714 Monroe street. President, J. Callahan, 912 Vinton street; recording secretary, Jas. Shea, 226 Platte street; financial secretary, O. H. Lewis, 820 Magnolia street.

*No. 246, Steubenville, O.—Meets first and third Fridays of month at Druids' Hall, N. Fourth st. President, S. M. Richards, 100 South street; recording secretary, F. E. Wagner, Clarendon Hotel; financial secretary, Dr. E. D. Richards, 8rd and South streets.

No. 247, Schenectady, N. Y.—Meets first and third Fridays of each month at Trades Assembly Hall, State street, near Canal bridge. President, Arthur E. Sparks, 20 Cora street; recording secretary, Herbert U. Merrill 110 State street; financial secretary, R. C. Schermerhorn, 840 Falge street.

*No. 248, Chillicothe, Ohio.—Meets second and fourth Fridays at Federal Labor Union Hall, 153 East Fifth street. President, E. O. Jackson, 157 West Water street; recording and financial secretary, H. M. Elliott, 20½ East Main street.

*No. 249, St. Catharines, Ontario.—Meets second and fourth Tuesday, each month, at Trades and Labor Hall, St. Paul street. President, J. W. Johnson, St. Catharines, Ontario; recording secretary, J. Charles Clifford, St. Catharines, Ontario; financial secretary, Joseph Lappin, St. Catharines, Ont.

*No. 250 San Jose, Cal.—Meets second and fourth Tuesdays in Phelan Hall, First and Post streets. President, R. R. Robinson, 417 South Tenth street; recording secretary, N. K. Kooper, 397 West San Carlos street; financial secretary, J. W. Hilton, No. 57 South Seventh street.

*No. 251, Pine Bluff, Ark.—Meets first and third Wednesdays at Carpenters Hall, 112½ W. Banague streets. President, B. R. Brown, P. O. Box 248; recording secretary, Vernon Mullen, P. O. Box 248; financial secretary, J. W. Johnson, P. O. Box 248.

*No. 252, Schenectady, N. Y.—Meets third Thursday each month at Ellis' Building, State street, next canal bridge. President, Charles Hefferman, 806 Jay street, continued; recording secretary, Ralph R. Lathrop, 6 Landon Terrace; financial secretary, Paul R. C. Peters, 14 Waverly Place.

*No. 253, Cedar Rapids, Iowa.—Meets second and fourth Sunday mornings at 10.30 at Union Hall, corner of First avenue and Second street. President, Tony Weidlich, 1086 South Sixth street, west; recording secretary, S. L. Stafford, 500 Seventh avenue, west; financial secretary, C. A. Isentrout, Iowa Tel. Co.

No. 254, Schenectady, N. Y.—Switch-board Makers.—Meets second and fourth Tuesdays at Machinists Hall, State and Jay streets. President, A. M. Franchois, 258 Broadway; recording secretary, D. Murphy, Hallet street; financial secretary, Jno. H. Cornick, 808 Grant avenue.

*No. 255, Ashland, Wis.—Meets first and third Tuesday of each month at Longshoremen's Hall, corner Ellis avenue, west and Front street. President, Chester Vrieland, Goeltz blk; recording secretary, Ernest Jacott, Franklin House; financial secretary, John E. Dunn, Judd blk.

*No. 256, Charleston, W. Va.—Meets every Wednesday evening at Trades and Assembly Hall,

107½ Capitol st. President, Frank Fisher, Home Tel. Co.; recording secretary, H. M. Pelpbry; financial secretary, C. P. Shively, Charleston Home Tel. Co.

*No. 257, Jackson, Miss.—Meets every Thursday in Bricklayers' Hall, W. Jackson street. President, J. N. Olson; recording secretary, J. M. Grafton; financial secretary, J. Hall, W. U. Tel. Co.

†No. 258, Providence, R. I.—Meets every Friday night at Hanley Hall, 68 Washington street. President, John Grant, 40 Church street, Cranston, R. I.; recording secretary, Edw. Gonyea, 3 Gifford street; financial secretary, Rod Chisholm, 2 Woodland street.

*No. 259, Salem, Mass.—Meets every Tuesday evening at I. O. O. F. Hall, Washington street. President, W. B. Jackson, 8 Bay street, Beverly; recording secretary, C. R. Hale, 408 Summer street, Lynn; financial secretary, F. A. Coker, 41 March street, Salem.

†No. 260, Fort Wayne, Ind.—Meets second and fourth Wednesday nights in each month in Hibernian Armory, 1022 Calhoun street. President, John T. Somers, 682 Hendricks street; recording and financial secretary, Leroy Zellers, 1420 Swinney ave.

†No. 261, Saratoga Springs, N. Y.—First and third Wednesday, Phythian Hall, 464½ Broadway. President, Ross Patterson, Imperial Hotel; recording secretary, W. H. Lavigne, 181 Clinton street; financial secretary, W. H. Owen, 42½ Caroline street.

*No. 262, Pullman, Ill.—Meets second and fourth Mondays at K. of P. Hall, Arcade Building. President, C. F. Oakley, 268 East Sixty-second street, Chicago; recording secretary, P. J. Von Weller, 888 West 103rd street, Chicago; financial secretary, Marshall E. Hill, 5548 Jefferson ave., Chicago.

*No. 263, Shamokin, Pa.—Meets Thursday evening at 7.30, Room 7, Sailer Zimmerman Building, Independence street. President, Harry T. Morgan, corner Pine and Diamond streets; recording secretary, Rosser Samuels, 118 Poplar street; financial secretary, Ed. Roth, 248 South Wood street.

†No. 264, Pittsfield, Mass.—Meets second and fourth Friday of every month at Bartenders Hall, England Block. President, E. C. Ventis, Lennox, Mass.; recording secretary, J. K. Beardsley, 44 Hamlin street, Pittsfield, Mass.; financial secretary, C. C. Rowley, 240 Tyler street.

*No. 265, Lincoln, Neb.—Meets every Monday at A. O. U. W. Hall, 128 South Tenth street. President, Mark T. Coster, 2181 S street; recording secretary, Wm. Drummond, 621 N. Sixteenth street; financial secretary, George W. Neally, 788 Thirteenth street.

*No. 266, Sedalia, Mo.—Meets every Thursday at Glass Hall, corner Third and Lamine streets. President, Milo J. Spahr, 812 W. Eleventh street; recording secretary, O. L. Gosnell, care of Missouri and Kansas Telephone Company; financial secretary, L. Eiseman, 705 East Fifteenth streets.

†No. 267, Schenectady, N. Y.—Meets first and third Saturday at Electrical Workers Hall, State and Center streets. President, B. A. Cawley, 77 Second av. ue; recording secretary, J. W. Andry, 584 Mumford street; financial secretary, John W. Cain, 50 Villa Road.

*No. 268, Newport, R. I.—First and third Fridays, at Central Labor Hall, Thames street. President, C. W. Holm, 14 Bliss Road; recording secretary, W. H. Mitchell, Daily Cottage, Dixon street; financial secretary, F. A. Bloom, 1 Harrison avenue.

*No. 269, Princeton, Ind.—Meets first and third Wednesday nights at I. B. of E. W. Hall, 108½ north Main street. President, C. F. Stevens Independent Tel. Office; recording and financial secretary, L. S. Kell, 211 South Seminary street.

†No. 270, New York, N. Y.—Meets every Thursday at "Labor Lyceum," 64 East Fourth street, New York City. President, J. A. Thomas, 228 West 128d street; recording secretary, G. W. Townsend, 614 Bainbridge street, Brooklyn; financial secretary, J. Gamble, 2791 Eighth avenue.

*No. 271, Altoona, Pa.—First and third Monday, each month, Carpenter's Hall, Thirteenth street and Eleventh avenue. President, Chas. Downs, Howard avenue and Eleventh street; recording secretary, F. T. Kleffman, 1114 Twelfth street; financial secretary, Harry Stewart.

*No. 272, Sherman, Texas.—Meets first and third Tuesdays, at Odd Fellows' Hall Walnut and Houghton streets. President, E. L. Dennis; recording secretary, E. A. Kurtz, P. O. Box 242; financial secretary, J. Dougherty.

*No. 273, Clinton, Iowa.—Meets second and fourth Wednesdays, at Labor Temple, Fifth avenue. President, J. J. Davis, 302 South Second street; recording secretary, O. A. Preat, 426 Dewitt.

*No. 274, Marietta, Wis.—Meets second and fourth Thursday at Trades Council Hall, Main street. President, E. A. Golden, 822 Wells street; recording secretary, Peter Edges, Armstrong street; financial secretary, F. E. McWayne, 1888 Stephenson street.

*No. 275, Muskegon, Mich.—Meets first and third Thursday at Trades and Labor Hall, Western avenue. President, Wm. Stines, 65 Sandford street; recording secretary, P. A. Peterson, 44 Jefferson street; financial secretary, C. B. Morey, 32 Miller avenue.

*No. 276, West Superior, Wis.—Meets first and third Tuesdays, at Union Hall, Hammond Block. President, W. W. Kielly, 918 Baxter avenue; recording secretary, J. R. Tillotson, 1820 Oaks avenue; financial secretary, P. C. Miller, 1801 Butler avenue.

*No. 277, Kingston, N. Y.—Meets first and third Thursday evenings at Recorder's Room, City Hall, Reilly street and Broadway. President, H. H. Buckbee, Lucas avenue; recording secretary, Roswell Coles, 78 Maiden Lane; financial secretary, H. Rumsey, 100 Downs street.

*No. 278, Rock Island, Ill.—Meets Turner Hall every Friday, Third avenue, between Fifteenth and Sixteenth streets. Rock Island, Ill. President, L. L. Corey, 2014 Iowa street, Davenport, Iowa; recording secretary, Will Newman, 512 Perry street, Davenport, Iowa; financial secretary, Jay C. Mead, 655 East Sixth street, Davenport, Iowa.

*No. 279, Terre Haute, Ind.—Meets second and fourth Mondays at Washington Hall, Eighty-first street and Wabash avenue. President, L. G. Murray, 104 N. Nineteenth street, Terre Haute, Ind.; recording secretary, Frank Wissel, 804 N. 13½ street, Terre Haute, Ind.; financial secretary, L. R. Dickerson, 509 S. Thirteenth st.

*No. 280, Hammond, Ind.—Meets first and third Friday at K. of P. Hall, 247 State street. President, B. C. Mead, 247 State street; recording secretary, S. J. Carpenter, 186 Clinton street; financial secretary, C. R. Sherard.

*No. 281, New Orleans, La.—Meets first Friday of the month at McMahon's Hall, Calliope and Dryadee. President, Chas. Kister, 2719 Philip street; recording secretary, P. Radlet, 1510 N. Robinson street; financial secretary, Geo. Lorricks, 6115 Laurel street.

*No. 282, Chicago, Ill.—Meets second and fourth Thursday at corner of 44th and Halstead streets. President, P. F. Sullivan, 5733 Wallace street; recording secretary, Wm. J. O. Cary, 5321 Wood street; financial secretary, Wm. Kemp, 3362 Andrews ave.

*No. 283, Oakland, Cal.—Financial secretary, E. W. Davis, Vincent House, Seventh and Market streets.

*No. 284, Rochester, N. Y.—(Station men.)—Meets second Thursday during July, August and September, second and fourth Thursday thereafter at Snider's Hall, North Water street. President, Jos. Sellenger, 778 North Clinton ave.; recording secretary, Wm. J. K. Sutherland, 49 East avenue; financial secretary, James B. Coyle, 84 University avenue.

*No. 285, Lynn, Mass.—Financial secretary, H. Patten, 29 Hanover street.

*No. 286, New Albany, Ind.—Meets every Monday night at Cigar Makers' Hall, State and Market street. President, J. B. Firster, 1822 Rear Market; recording secretary, John Ulmer, 801 Pearl street; financial secretary, J. P. Elliott, 526 Cubb avenue.

*No. 287, Philadelphia, Pa.—Meets every Wednesday in Electrical Workers Hall, Darlen and Vine streets. President, Chas. H. Weir, 1922 Stanley street; recording secretary, Thos. Carroll, Palmyra, N. J.; financial secretary, Geo. Shaffer, 818 North Thirteenth street.

*No. 288, Waterloo, Iowa.—Meets first and third Thursday at Central Labor Hall, 215½ E. Fourth street. President, J. N. Wright, 520 Lafayette street; recording secretary, W. E. Washburn, 128½ Sycamore street; financial secretary, E. W. Fisher, P. O. Box 764.

*No. 289, Santa Cruz, Cal.—Meets every Tuesday evening at Labor Union Hall, Walnut ave. President, Don A. Loucks, Alta House; recording secretary, Frank E. Daubenbiss, R. F. D. No. 2, Box 555; financial secretary, J. E. Judd.

*No. 290, Danville, Ill.—Meets first and third Mondays at business agents office, 25 West Main street. President, Pearl Baum, 307 Oak street; recording secretary, Bert Smith, 214 E. Madison street; financial secretary, W. E. Crosley, 12 E. North street.

*No. 291, Boise City, Idaho.—Meets every Friday evening at Labor Hall, Banack street, between Eighth and Ninth streets. President, W. W. Moore, Thirteenth and Eastman streets; recording secretary, James D. McCune, Pacific Hotel; financial secretary, T. H. Martin, P. O. Box 525.

*No. 292, Minneapolis, Minn.—Meets second and fourth Tuesdays at Union Temple, No. 8. President, P. W. Hall; recording secretary, T. F. Brady; financial secretary, H. M. Crawshaw, 2027 Willow avenue.

*No. 293, North Adams, Mass.—Meets every second Sunday at 11 a. m., at Sullivan Block, Main street. President, Fred. W. Pinkham, Holden street; recording secretary, Arthur A. Isbell, 80 Porter street; financial secretary, Edward S. Boylan, 18 School street.

*No. 294, Muncie, Ind.—Meets first and third Wednesdays of each month at Union Labor Hall, 8d floor, corner Walnut and Main streets. President, Clyde Zecke, Box 678; recording secretary, Orvil Overcrash; financial secretary, Ralph Garst, 468 Wheeling avenue.

*No. 295, Little Rock, Ark.—

*No. 296, Poughkeepsie, N. Y.—Meets first and third Monday evening each month, at 405 Main street. President, Jno. McAbee, 9 Cannon street; recording secretary, Fred Wiggan, 35 Market street; financial secretary, Jacob Ostram, 87 South Bridge street.

*No. 297, Piqua, Ohio.—Meets second and fourth Thursdays at Plock's Hall, 114 South Main street. President, J. G. Ballard, Tippecanoe City, Ohio; recording secretary, C. M. Reed, 617 River street, Piqua, Ohio; financial secretary, W. P. Callister, General Delivery.

*No. 298, Findlay, Ohio.—President, George Hildebrand, 605 Cherry street; recording secretary, F. M. Biggs, 208 Clinton Court; financial secretary, C. V. Darrow, Elect. Supply and Construction Co.

*No. 299, Camden, N. J.—Meets every Thursday at Daley's Hall, Seventh and Burch streets. President, Edward Garvy, 218 Linden street; recording secretary, Peter T. Ward, 619 Cedar street; financial secretary, H. B. Fraser, 814 Linden street.

*No. 300, Auburn, N. Y.—Meets every Thursday, at C. M. B. A. Hall, Franklin street. President, A. Long, 123½ Fulton street; recording secretary, Harry Richter, Hoffman street; financial secretary, A. Long, 123½ Fulton street.

*No. 301, Texarkana, Ark.—Meets every Wednesday at Union Labor Hall, 218 Pine street. President, W. F. Robinson, 214 Walnut street; recording secretary, George E. Russell, 226 State Line; financial sec'y, J. F. French, 226 State Line.

*No. 302, Peoria, Ill.—Meets First and third Tuesdays of each month at Carpenters Hall, 218 Main street. President, John Hoffman, 102 Windom street; recording secretary, H. C. Lupton, 404 Cooper street; financial secretary, Anthony Bickerdt, 320½ Brvon St.

*No. 303, Lincoln, Ill.—Meets first and third Wednesday of each month at Painters' Hall, East Pulaski street. President, F. E. Taylor,

330 Third street; recording secretary, E. S. Ransdell, 817 South Klockapoo street; financial secretary, C. E. Chowning, 302 Delavan street.

† No. 304, New Haven, Conn.—Meets first and third Tuesday at Union Hall, 99 Orange street. President, W. R. Johnson, 773 Whitney avenue; recording secretary, W. M. Dutton, 542 Chapel street; financial secretary, C. B. Thorpe, 64 Center street.

† No. 305, Fort Wayne, Ind.—Financial secretary, A. H. Meyer, 69 Elizabeth st.

* No. 306, Albuquerque, New Mex.—Meets second and fourth Fridays of each month at Central Labor Union Hall, 214 West Railroad avenue. President, Bert Moe, P. O. Box 259; recording secretary, E. K. Armstrong, P. O. Box 259; financial secretary, M. H. Sweet, P. O. Box 259.

* No. 307, Cumberland, Md.—Meets Wednesday at 8 p. m. in City Hall Building, third floor. President, Michael Gill, General Delivery; recording secretary, W. M. Lanman, Mt. Savage, Md.; financial secretary, C. W. Prince, 52 Columbia street.

† No. 308, Beaumont, Tex.—Meets every Tuesday night in Gray Building, Pearl and Washington streets. President, E. T. Simmonds, 915 Forsythe street; recording secretary, M. E. Graves, 445 Orleans street; financial secretary, W. G. Miller, 515 Orleans street.

† No. 309, East St. Louis, Ill.—Meets every Tuesday evening at Bartenders' Hall, Fourth street, near Broadway. President, Charles Bennett, State and Sixteenth streets; recording secretary, C. Arnold, 22 North Main street, E. St. Louis, Ill.; financial secretary, R. Hartske, 2752 Lafayette ave.

* No. 310, Stamford, Conn.—Meets first Monday of each month, Wm. T. Minor Post, G. A. R. Hall, 442 Main street. President, Goodrich E. Risley, 192 Atlantic street; recording secretary, John J. Farrell, Glenbrook; financial secretary, Norman R. Wilcox, 109 Stillwater avenue.

* No. 311, Beloit, Wis.—Meets second and fourth Thursday at Trades Council Hall, West Grand avenue and Third street. President, Geo. Jones, E. No. 27; recording secretary, S. E. Bartlett, 422 State street; Thos. Heffernan, 122 W. Merrill street.

* No. 312, Rome, Ga.—President, R. L. Maxwell; financial secretary, R. W. Callaway, 813½ Broad street.

† No. 313, Wilmington, Del.—Meets first and third Friday at N. E. corner of 8th and Orange. President, David Gray, N. E. corner Thirteenth and Tatnall street; recording secretary, Geo. N. Senior, 318 Tatnall street; financial secretary, Geo. T. Lyon, 422 E. Fifth street.

* No. 314, Tyler, Texas.—Meets second and fourth Wednesdays at Trades Council Hall, South side Square. President, F. E. L. Ivey, care of Bell Telephone Co.; recording secretary, W. B. Roberts, 501 West Houston street; financial secretary, W. B. Roberts, 501 West Houston street.

* No. 315, Baton Rouge, La.—President J. H. Hawkins; financial secretary, H. A. Selser, 1011 Africa street.

* No. 316, Ogden, Utah.—Meets every Saturday, night at Union Labor Hall, 264 Twenty-fourth street. President, R. F. Dean, P. O. Box 44; recording secretary, Geo. M. Stoddard, P. O. Box 44; financial secretary, H. B. Hill, P. O. Box 44.

* No. 317, Portland, Oreg.—Financial secretary, C. F. Canfield, 447 E. Davis street.

† No. 318, Knoxville, Tenn.—Meets first and third Saturday, at Independent Hall, corner Gay and Cumberland sts. President, W. J. Radcliffe; recording secretary, J. O. Shelley, 305 Scott ave.; financial secretary, F. P. O'Connor, 605 W. Vine ave.

† No. 319, Pittsburg, Pa.—Meets first and third Mondays at K. of L. No. 3 Hall, 585 Smithfield street. President, George Plenau, Gray street, Mt. Wash. Pittsburg, Pa.; recording secretary, Wm. G. Comrie, 5815 Holden street, East End; financial secretary, Wm. A. Kelly, 36 Oakland square.

* No. 320, Paris, Tex.—Meets every Wednesday at N. Main street, over Wray's saloon. President, D. A. Jones, 615 Bonham street; recording

secretary, Edwin Burke, Box 238; financial secretary, W. N. Santa, 735 N. Main street.

* No. 321, La Salle, Ill.—Meets first and third Saturdays at Reed and O'Neil's Hall, Main st. President, J. E. Mullen; recording secretary, W. Dusch, 227 Bucklin street; financial secretary, Wm. Bulfer, 1729 Fourth street, Peru, Ill.

* No. 322, Kokomo, Ind.—Meets every Wednesday, Buckeye, south of Sycamore street. President, Ed. Vaughn, 272 S. Buckeye street; recording and financial secretary, C. E. Jolliffe, 150 South Main street.

* No. 323, Fairmont, W. Va.—Meets Saturday nights at Musgrave Hall, Monroe street. President, John Tohan, 879 West Queen street; recording secretary, John Frye, 32 Mansfield avenue; financial secretary, L. E. Thornton, 26 Ezar street.

* No. 324, Brazil, Ind.—Meets alternate Tuesday nights at United Mine Workers' Hall, Main and Walnut streets (Opera Block). President, Harry Reed, 12 W. Maple street; recording secretary, Birt Staats, 203 South Lambert street; financial secretary, L. M. Moore, 203 South Lambert street.

* No. 325, Binghamton, N. Y.—Meets every Friday, 8 p. m. at C. L. U. Hall, 79 State street. President, F. K. Spencer, 18 New street; recording secretary, Emmitt W. Sullivan, 120 De Russey; financial secretary, William J. Bidwell, 120 Washington street.

* No. 326, Conneville, Pa.—Meets second and fourth Tuesdays at Rutsek's Hall, cor. Main and Arch Streets. President, Morris L. Williams, Dunbar, Pa.; recording secretary, M. A. Hopwood, New Haven, Pa.; financial secretary, Paul McDonald, 234 E. Apple street.

* No. 327, West Palm Beach, Fla.—Meets first and third Mondays at Central Labor Hall, Clematis avenue. President, E. W. J. Parrish, W. Palm Beach; recording secretary, A. S. Brown, W. Palm Beach; financial secretary, J. E. Chambers.

* No. 328, Oswego, N. Y.—Meets every second Wednesday evening, Trades and Labor Hall, West 1st between Bridge and Oneida street. President, John Goodwin, 818 Walnut street; recording secretary, J. J. Glynn, 69 East Cayuga street; financial secretary, Frank Gallagher, 79 East Eighth street.

* No. 329, Shelbyville, Ind.—Meets every Friday night at Union Labor Hall, Public Square. President, Alfred C. Lee, 26 Second street; recording secretary, Frank Shewmon, West Jackson st.; financial secretary, A. C. Lee, 26 Second street.

† No. 330, Kansas City, Mo.—Meets first and third Wednesdays in Electrical Workers Hall, 1833 Grand ave. President, R. B. Weaver, 1019 Baltimore avenue; recording secretary, Earl C. Zoll, 1109 Charlotte street; financial secretary, Geo. Lewis, 1428 Campbell street.

* No. 331, Long Branch, N. J.—Meets first and third Monday each month at Phil Daly's Hose Company's Hall, Second avenue. President, E. J. Dougherty, 174 Union ave.; recording secretary, John A. Brokaw, 31 Washington street; financial secretary, Jno. Coles, Jr., Box 127, Station B, Long Branch, N. J.

* No. 332, Sault Ste Marie, Mich.—Meets Tuesday night, at La Lond Block, Ashmun streets. President, D. Howey, 821 Lizzie street; recording secretary, P. E. Sheeley; financial secretary, Ben Bainbridge, 307 John street.

* No. 333, Emporia, Kans.—Meets every Tuesday night at 323½ Commercial street. President, E. McKinsey, 101 So. West street; recording secretary, W. M. Johnson, 709 Merchant street; financial secretary, W. C. Prince, 210 So. Merchant street.

* No. 334, Bellingham, Wash.—Meets first and third Wednesdays at Eagles Hall, cor. Elk and Magnolia streets. President, R. U. Muffy; recording and financial secretary, H. H. Horton.

* No. 335, Springfield, Mo.—Meets Wednesday, Odd Fellows Hall, 302 Boonville street. President, G. H. Robinson, 604 South street; recording secretary, R. T. Brennan, 433 S. Main street; financial secretary, C. A. Hoag, 353 S. Jefferson street.

* No. 336, Oskaloosa, Iowa.—Meets first and third Tuesdays, at Engineer's Hall, West High

AUG 1904

avenue. President, Jas. Poling, Oskaloosa; recording secretary, John Teas, Oskaloosa; financial secretary, G. W. Gordon, 207 E. Third avenue.

*No. 337, Parsons, Kans.—Meets first and third Fridays in each month in City Hall, Eighteenth street, between Forest and Johnson avenues. President, Frank Heller, 2126 Crawford avenue; recording secretary, Dan Parks, 1620 Gabriel avenue; financial secretary, Roy B. Power, 1117 South Sixteenth street.

*No. 338, Deason, Tex.—Meets every first and third Thursdays at Labor Hall, 202½ W. Main street. President, Jack Cleveland, care of G. Co. Tel. Co.; recording and financial secretary, J. W. Acree, 101 East Day street.

*No. 339, Sterling, Ill.—Meets first and third Wednesday at Labor Hall, 908 Locust street. President, Geo. Thomas, Sterling, Ill.; recording secretary, John Powers, 105 Twelfth avenue; financial secretary, R. L. Fairbrother, 1011 First avenue, Sterling, Ill.

*No. 340, Sacramento, Cal.—Meets first and third Mondays at Pythian Castle, corner Ninth and I streets. President, C. W. Beaton, 1620 I street; recording secretary, Geo. H. Curtis, 1318½ Sixteenth street; financial secretary, E. G. Fletcher, Pythian Castle.

*No. 341, Ottawa, Ill.—Meets second and fourth Wednesdays of each month, at Gebhardt's Hall, 630 West Madison street. President, Wm. L. Spore, 119 W. Washington street; recording secretary, J. H. Brown, 1225 Phelps street; financial secretary, T. A. Stone, Gen. Union Tel. Co.

*No. 342, New Brighton, Pa.—Meets first and third Thursdays, E. J. Ryan's Hall, corner Third avenue and Ninth street. President, Geo. J. Wolf, 1709 Fourth avenue, Beaver Falls, Pa.; recording secretary, Chas. Cook, 621 Eighth street, Beaver Falls, Pa.; financial secretary, J. L. Allwine, 664 Case street, Rochester, Pa.

*No. 343, Norwich, Conn.—Meets fourth Wednesday at Carpenters' Hall, Shetucket street. President, J. M. Fillmore, 23 Spring street; recording secretary, Wm. M. Laren, 26-28 Broadway; financial secretary, Walter Holden, 150 Main street.

*No. 344, New London, Conn.—Meets first and third Friday at Bacon Block, State street. President, W. H. Vibber, 24 Mountain avenue; recording secretary, C. C. Comstock, 5 Franklin street; financial secretary, John S. Loveless, 11 Berkley avenue.

*No. 345, Mobile, Ala.—Meets second and fourth Mondays at I. O. O. F. Hall, corner of St. Joseph and St. Michael streets. President, J. W. Scouyers, 804 Elmira street; recording secretary, C. L. Singler, care of Electric Light Co., Royal and St. Louis streets; financial secretary, W. E. Prewitt, 810 Charleston street.

*No. 346, Fort Smith, Ark.—Meets first and third Tuesday at K. of P. Hall, over 708 Gar. avenue. President, C. P. Rowe, S. D. and Twelfth street; recording secretary J. P. Hamilton, 305 South Tenth street; financial secretary, W. H. McDonald, 710 South Eleventh and H streets.

*No. 347, Peru, Ind.—Meets first and third Friday at Teamster's Hall, Petty Block. President, Frank Seamon, 72 E. Fifth street; recording secretary, Elmer Burlingame, 217 E. Fifth street; financial secretary, S. C. La Boyteant, 59 W. Third street.

*No. 348, Greenville, Tex.—Meets second and fourth Thursday at Labor Hall, 278 West Lee street. President, C. A. Duck, 216 N. Stonewall street; recording secretary, W. Brame; financial secretary, C. M. Christopher.

*No. 349, Miami, Fla.—Meets first and third Mondays in Electrical Hall, Fourteenth street. President, W. D. Avery, Fourth street; recording and financial secretary, R. D. Taylor, 305 Third street.

*No. 350, Hannibal, Mo.—Meets second and fourth Monday at Bartenders Hall, corner of Main and Broadway. President, Lawson Steadman, 306 North Third street; recording secretary, Geo. M. Jackson, 220 Rock street; financial secretary, Harry Janes, 211 Center street.

*No. 351, Meriden, Conn.—Meets first and third Wednesday each month, at Turners' Hall, Pratt

street. President, John J. Buckley, 29 Pratt street, Meriden, Conn.; recording secretary, Charles Bellows, 16 Bristol street, Wallingford, Conn.; financial secretary, A. E. Cooke, Crown street, Meriden, Conn.

*No. 352, Lansing, Mich.—Meets second and fourth Tuesday at Labor Hall, Washington avenue, north. President, Bert Evans, 784 Shaw street, west; financial secretary, J. D. Mosher, 585 Larch, north; recording secretary, C. Edington, 111 Short street.

*No. 353, Toronto, Can.—Meets first and third Mondays, at Occident Hall, cor. Queen and Bathurst streets. President, John Tottan, 879 Queen street, West; recording secretary, J. Fyfe, 82 Mansfield avenue; financial secretary, L. E. Thornton, 26 Exar street.

*No. 354, Salt Lake City, Utah.—Meets every Thursday at Federation of Labor Hall, corner South and State streets. President, W. H. Meldrum, P. O. Box 207; recording secretary, O. K. Sandberg, 217 Oak street; financial secretary, W. F. Showells, P. O. Box 218.

*No. 355, Pittsburg, Pa.—Meets second and fourth Thursday at First National Bank Building, Wilkinsburg, Pa. President, W. J. Wington, 211 Ninth avenue, Homestead; recording secretary, W. G. McGettigan, East Pittsburg; financial secretary, Geo. M. Smith, P. O. Box, 217, East Pittsburg.

*No. 356, Kansas City, Mo.—Meets every Monday, in Electrical Workers' Hall, 1833 Grand avenue. President, Sam H. Hawkins, 1833 Grand avenue; recording secretary, F. J. Schadel, 1833 Grand avenue; financial secretary, C. F. Drolinger, 1833 Grand ave.

*No. 357, Pittston, Pa.—Meets first Thursday on or after the 15th at Advocate Office, Butler Block. President, John Sheridan, 17 High street, Pittston; recording secretary, P. F. Toole, Union street, Pittston; financial secretary, George Judge, Clark Lane, Pittston.

*No. 358, Perth Amboy, N. J.—Meets first and third Thursdays at Carpenters' Union Hall Srikker's Building, 138 Smith street. President, V. Christofferson, 137 Fayette street; recording secretary, Geo. Skirm, 161 Washington street; financial secretary, Ambrose Mather, 44 East venue.

*No. 359, Iron Mountain, Mich.—Meets first Thursday, Odd Fellow's Building, 421 Stephenson avenue. President, Quirin Stephany, 108 E. Ludington street; recording secretary, Elmer Croll, 1025 River avenue; financial secretary, Conrad Carlson, 1120 River avenue.

*No. 360, Sioux Fall, S. D.—Meets second and fourth Wednesday at Labor Hall, Syndicate Block. President, M. G. Lacy, care Citizens Tel. Co.; recording secretary, L. H. Snyder, care N. U. Tel. Ex. Co.; financial secretary, Chas. Height, care Citizens Tel. Co.

*No. 361, Lawrence, Kans.—President, Joseph Basky, 501 Alabama street; recording secretary, Jas. Hart, West Elliot street.

*No. 362, Kankakee, Ill.—Meets every Monday at Painters' Hall, E. Court street. President, F. E. Jeffers, Hospital, Illinois; recording secretary, Neal Madigan, 159 W. Court street; financial secretary, A. E. Davids, 159 W. Court street.

*No. 363, Montgomery, Ala.—Meets second and fourth Tuesdays, 20½ South Perry street. President, E. Goolsby, 103 Clitheral avenue; recording secretary, Jas. F. Brady, 112 N. Hull street; financial secretary, W. D. Bivins, 218 Columbus street.

*No. 364, Guthrie, Okla.—Meets first and third Tuesdays at Armory Hall, 109 West Harrison avenue. President, Art Carpenter; recording secretary, W. F. C. Perry; financial secretary, A. H. Harmon, 324 Springer street.

*No. 365, Fulton, Mo.—Financial secretary, Herman Glahn, Fulton.

*No. 366, Allentown Pa.—Meets first and third Sundays every month, Nagles Hall, corner 7th and Turner sts. President, J. S. Hoffman, 1315 Court st.; recording secretary, John F. Gaffey, 183 Tilgham street; financial secretary, Charles Hoffman, 1315 Court street.

*No. 367, St. Louis, Mo.—Meets first and third Sundays, 2.20 p. m. President, C. A. Hose, 1927

Florissant avenue, St. Louis, Mo.; recording secretary, Nelson Bolan, Granite City, Ill.; financial secretary, G. E. Sutter, 4603 Cook ave.

*No. 368, New York, N. Y.—Meets second and fourth Wednesday, Union Hall, 1591 Second avenue. President, Thomas C. Yoe, 2558 Eighth avenue; recording secretary, Jas. Wellington, 802 W. 129th street; financial secretary, J. J. McCarty, 202 E. 96th Street.

*No. 369, Louisville, Ky.—Meets first and third Fridays of each month at Beck's Hall, Jefferson street, between First and Second. President, L. Rosenfield, R. F. D. No. 2, Sta. E.; recording secretary, J. A. Magness, 2231 Brook street; financial secretary, Dave Butterfield, 1767 Wilson avenue.

*No. 370, Los Angeles, Cal.—Meets Friday of each week, 416 West Sixth street, Room 22. President, G. E. Ramsey, 416 West Sixth street; recording secretary, W. M. Baker, 187 N. Eastlake; financial secretary, Hal Hamner, 819 West Avenue Fifty-one.

*No. 371, Redding, Cal.—Meets first and third Tuesdays at Horn's hall, 516 California street. President, John T. Reed, Golden Eagle Hotel; recording secretary, J. C. Powel, Temple Hotel; financial secretary, D. W. Rathburn, 828 Gold st.

*No. 372, Boone, Iowa.—Meets first and third Fridays at North Side Union hall, 917 Tenth street. President, H. C. Elliott, 515 Tenth street; recording and financial secretary, A. J. Berl, 1556 Fifth street.

*No. 373, Oneida, N. Y.—Meets second and fourth Monday of every month at Trades Assembly Hall, 20 James street. President, F. W. Brickley; recording and financial secretary, W. H. Percival, 14 Prospect street.

*No. 374, Escanaba, Mich.—Meets every first and third Friday evening at Lemmer's Hall, 810 Ludington street. President, J. H. Harkins, 516 Wells avenue; recording and financial secretary, W. G. Compton, 808 Wolcott street.

*No. 375, Jefferson City, Mo.—Meets second and fourth Sundays in each month at K. of P. Hall, corner High and Madison streets. President, M. P. Gaddis; recording and financial secretary, Geo. W. Fleming, 418 E. McCarty St.

*No. 376, Chicago, Ill.—Meets every first and third Mondays of month at Electrical Workers' Headquarters, 100 Franklin street. President, Thos. Queenan, 100 Franklin street; recording secretary, Jno. Luebke, 100 Franklin street; financial secretary, James J. Lamb, 100 Franklin street.

*No. 377, Lynn, Mass.—President D. Duval, 81 Whittier street; recording secretary, L. A. Wentworth, 84 Leyman street; financial secretary, H. F. Bullock, 81 Whittier street.

*No. 378, Sheffield, Ala.—Meets Friday nights in K. of P. Hall. President, F. C. Brumbach; recording and financial secretary, E. L. Howard.

*No. 379, Greensburg, Pa.—Meets first and third Thursday of each month, at Glunts Hall, corner East Pittsburg street and Maple avenue. President, C. M. Morgan, West Pittsburg street; recording secretary, M. McLaughlin, 219 Main street; financial secretary, H. E. Peters.

No. 380, Salt Lake City, Utah.

*No. 381, Chicago, Ill.—Meets second and fourth Tuesdays in month at Adam Koch's Hall, 104 E. Randolph street. President, C. M. Hall, 186 Indiana street; recording secretary, E. N. Nockels, 56 Fifth avenue, room 518; financial secretary, O. A. Lawson, 419 Cornelia street.

*No. 382, Columbia, S. C.—Meets Wednesday night, at Independence Hall, over Independent Engine House, between Main and Assembly streets. President, W. J. Jones, 918 Oak Street; recording secretary, J. B. Dodenhoff, 2025 Lincoln street; financial secretary, E. D. Wallace, 1400 Laurel street.

*No. 383, Mattoon, Ill.—President, Harry Schock; recording secretary, Ned Malaine; financial secretary, L. Morganstein, Fire Department.

*No. 384, Muskogee, Ind. Ter.—Meets second and fourth Thursday in W. C. T. U. Hall on C street. President, W. C. Shull; recording secretary, S. O. Wood; financial secretary, R. J. Johnson.

*No. 385, Lawrence, Mass.—Meets first and third Mondays at Bugbee Hall. President, R. H. Morris, 167 Prospect street; recording secretary, T. H. Hogarth, 86 Andover street; financial secretary, J. J. McCrillas, 259 South Broadway.

*No. 386, New Iberia, La.—Meets third Saturday of each month, Corinne and Main streets. President, George Fay; recording secretary, E. R. Chivers; financial sec'y, W. A. Broussard.

*No. 387, Freeport, Ill.—Meets every first and third Wednesday at Stephenson street. President, C. L. Gulon, 95 Cottonwood street; recording secretary, Chas. Kuntz, 58 Ottawa street; financial secretary, Jas. B. Gaffney, 237 Douglas avenue.

*No. 388, Palestine, Tex.—Meets first Tuesday of each month at Power House Hall, Avenue A. President, S. B. Taylor, Reagan street; recording secretary, Z. A. McReynolds, in care Light Co.; financial secretary, D. E. Bostick, P. O. Box 884.

*No. 389, Paterson, N. J.—Meets every first and third Tuesday, in Columbia Hall, 462 Main street. President, F. H. Holmes, Lodi, N. J.; recording secretary, Charles Walton, 57 Twenty-third avenue; financial secretary, Geo. Twigger, 330 Market street.

*No. 390, Johnstown, Pa.—Meets every Wednesday night at United Workmen's Hall, Main street. President, W. O. Draucher, Cook Hotel; recording secretary, M. L. Lower, 245 Llewellyn street; financial secretary, Harry F. Davis, Conemaugh, Pa.

*No. 391, Meridian, Miss.—Meets every Tuesday night at Painters Hall, Second street between 22nd and 23rd avenues. President, W. F. Johnson, P. O. Box 70; recording secretary, H. F. Harwell; Thirty-eighth avenue between Ninth and Tenth streets; financial secretary, Fred Keeton, Nineteenth avenue and Twelfth street.

*No. 392, Troy, N. Y.—Meets every Thursday night in Red Men's Hall, First and Congress streets. President, C. Rasmussen, Lynd House; recording secretary, Seymour Scott, Ingalls ave.; financial secretary, Wm. P. Hayden, 510 Fourth street.

*No. 393, Detroit, Mich.—Meets second and fourth Friday, in Johnson's Union Headquarters, corner Monroe avenue and Farrar street. President, G. A. Weisenhausen, 155 Antletam street; recording secretary, Sydney A. Smith, 368 Cass avenue; financial secretary, Burn. Tiffin, 247 Fourth avenue.

*No. 394, Auburn, N. Y.—Meets first and third Wednesdays at Mantel Hall, Water street. President, Thomas H. Mohan, 1 School street; recording secretary, R. C. Leek, 155 Clark street; financial secretary, D. Ehle, 84 Genesee street.

*No. 395, Kalamazoo, Mich.—Meets first and third Monday of each month, Trades and Labor Hall, South Burdick street. President, Geo. C. Milham, 722 Stockbridge ave.; recording secretary, Burton A. Whipple, 322 E. Lovell street; financial secretary, Morris W. Doyle, 426 Woodland avenue.

*No. 396, Boston, Mass.—Meets second Wednesday, at Seaver Hall, Paine's Mem. Building, Appleton street. President, W. W. Emmons, 125 Milk street (basement); recording secretary, D. R. McGregor, 241 Minot street, Dorchester, Mass.; financial secretary, A. R. Young, 709 Broadway, Chelsea, Mass.

*No. 397, Quebec, Canada. Meets first and third Monday at Moisons Hall, St. Helene and St. Anselme. President, E. L. Heureux, 394 St. Valier street; recording secretary, N. Mathurin, 238 St. Valier street; financial secretary, A. Bouret, 18 Levis street.

*No. 398, St. Cloud, Minn.—Meets every second and fourth Tuesday at A. O. U. W. Hall, corner Fifth avenue and First street, south. President, Gottlieb Gehrenback, Twelfth avenue N.; recording secretary, Harry Hamlin, Sauk Rapids, Minn.; financial secretary, F. B. Doten, 618 Sixth avenue, south.

*No. 399, Portland, Me.—Meets every Tuesday at Farrington Block, Congress street. President, F. E. Sargent, 308 Portland street; recording secretary, W. J. Ingersoll, 8 C street, Knightville, Me.; financial secretary, A. G. Moody, 86 Lancaster street.

*No. 400, Ottawa, Ontario.—Meets second and fourth Wednesdays at Murphy's Hall, Sussex street. President, M. F. Mead, 84 Murray street; recording secretary, O. G. Keyes, 467 Rideau street; financial secretary, A. Seguin, 80 Water street.

*No. 401, Burlington, Iowa.—Meets every Monday evening at Carpenters Hall, Third and Jefferson street. President, L. R. Sherrill, 104 N. Main street; recording secretary, W. F. Moore, 918 S. Third street; financial secretary, W. F. Moore, 918 S. Third street.

*No. 402, Portchester, N. Y.—Meets every first and third Monday nights at 8 each month, at Washington Hall, 115 North Main street. President, Andrew Bell, 28 Haseco avenue; recording secretary, Daniel B. Purdy; P. O. Box 240, Port Chester, N. Y.; financial secretary, J. C. Irving, Greenwich, Conn.

*No. 403, Meadville, Pa.—Meets every second and fourth Wednesdays at Central Labor Hall, Eller Block, Water street. President, Oliver Stockholm, Wallace street; recording secretary, W. N. Banta, Phoenix Hotel; financial secretary, F. A. Berg, 782 Liberty street.

*No. 404, Denver, Colo.—(Winders)—Meets every Tuesday at 512 Charles Building. President, W. C. Metzgar, 115 West Bayard street; recording secretary, A. W. Gay, 1245 Clarkson street; financial secretary, Jack H. Cook, Hotel Midland.

*No. 405, Houghton, Mich.—meets first and third Thursday of each month at Union Hall, Sheldon street. President, John Crawford, Houghton; recording secretary, W. M. Bates, Houghton; financial secretary, E. J. Poirier.

*No. 406, Ardmore, Ind. Ter.—Meets Friday of each week at Union Hall, West Main street. President, E. M. Parker; recording secretary, John A. Ball; financial secretary, A. A. Holcomb, P. O. Box 346.

*No. 407, Marquette, Mich.—Meets every second and fourth Saturday of each month at Siegel's Hall, N. Third streets. President, O. H. Slewert, 389 West Alger street; recording secretary, C. A. Ellstrom, 321 West Bluff street; financial secretary, G. H. Kemper, 511 West Ridge street.

*No. 408, Missoula, Mont.—Meets every second and fourth Tuesday at Fireman's Hall, West Main street. President, J. B. Ashley, Missoula, Mont.; recording and financial secretary, C. H. Christensen, 805 East Front street.

*No. 409, Ithaca, N. Y.—Meets first and third Saturday of every month at Central Labor Union Hall, East State street. President, A. E. Day; recording secretary, H. W. Barnard, 202 South Cayuga street; financial secretary, O. Rittenhouse, 505 South Albany street.

*No. 410, Fitchburg, Mass.—Meets second and fourth Friday at C. L. U. Hall, 5 Main street. President, Daniel McDonald, 6½ Congress street; recording secretary, R. W. Larrabee, 374 Main street; financial secretary, D. L. Toomly, 17 Blossom street.

*No. 411, Warren, O.—Meets first and third Wednesdays at Labor Hall, Main street. President, S. F. Messer, 318 North Tod avenue; recording secretary, C. C. Mason, 504 South Pine street; financial secretary, Geo. L. Hardy, Niles, Ohio.

*No. 412, Mankato, Minn.—Meets first and third Thursdays of each month at Williams' Hall, corner Front and Hickory streets. President, W. C. Sesilco, 429 Belgrade avenue; recording secretary, Chas. Brandon, 114 S. Fourth street; financial secretary, R. A. Anderson, box 140.

*No. 413, Manila, P. I.—Meets first and third Mondays of each month at Levy's Hall, Calle Exchange 59. President, Frank Moffett, 144 Manila; recording secretary, R. R. Landon, General Delivery; financial secretary, Charles A. Schoendube, 144 Manila.

*No. 414, Norwalk, Ohio.—Meets second and fourth Wednesdays at Central Labor Union Hall, Whittlesey avenue and Monroe street. President, Ralph Farley; recording secretary, Harry Stoughton; financial secretary, Adelbert Graham.

*No. 415, Cheyenne, Wyo.—Meets every first and third Mondays, K. P. Hall, West 17 street. President, F. P. Edlund, cor. Twenty-first and Van Lennan; recording secretary, Arthur Noe; financial secretary, B. M. Vance, box 580.

*No. 416, St. Joseph, Mo.—Meets every Thursday at N. W. corner Seventh and Fexil streets, Secret Service room, second floor. President, W. H. Winters, 607 S. Third street; recording secretary, H. F. Howard, 318 N. Ninth street; financial secretary, J. A. Wells, 1620 N. Second street.

*No. 417, Newburgh, N. Y.—Meets every second and fourth Saturday at Labor Hall, Ann street, between Johnson and Liberty. President, John Gilroy Mesger, 1 High street; recording secretary, Raymond Hathaway Williams, 215 First street; financial secretary, Thomas Perrott, 82 Smith street.

*No. 418, Mt. Vernon, Ind.—Meets second and fourth Monday nights at Franks Place, Main street. President, Geo. B. Duncan; recording and financial secretary, Oscar H. Brinkman, Box 405.

*No. 419, Jacksonville, Ill.—President, P. Traube; recording secretary, J. A. Lemington, 1018 N. Church street; financial secretary, O. Sorrelas.

*No. 420, Moberly, Mo.—Meets second and fourth Tuesday night of each month at Lincoln G. A. H., Reed street. President, Riley Patterson, Moberly, Mo., care of Richmond Hotel; recording secretary, E. J. Hayes, 629 Culp street, Moberly, Mo.

*No. 421, Watertown, N. Y.—President, N. W. Pillan; recording and financial secretary Geo. Dickerson, 57 A Arsenal street.

*No. 422, Hackensack, N. J.—Meets second and fourth Tuesdays of each month, Armory Hall, corner of State and Mercer. President, D. T. Evans; recording secretary, Bert M. Pratt, 52 Main street; financial secretary, Walter Kingsley, Kansas street.

*No. 423, Montreal, P. Q.—Meets First and Third Friday each month, at Arcanum Hall, 2444 St. Catherine street. President, L. R. McDonald, 2 Brunswick street; recording secretary, T. W. Rothery, 81½ Latour street; financial secretary, F. W. Cotten, 534 Antoine street.

*No. 424, Milwaukee, Wis.—Meets every Wednesday, 8 p. m., at Pascheu's Hall, 325 Chestnut street. President, F. M. Stark, 717 St. Paul ave.; recording secretary, Wm. McFadden, National Soldiers' Home; financial secretary, J. W. Daley, 496 Twenty-seventh street.

*No. 425, Wilmington, Del.—Meets second and fourth Fridays at corner Eighth and Orange streets. President, E. B. Ferrel, 802 West Sixth street; recording secretary, H. Mason, 8 Riddle avenue; financial secretary, R. S. Hertzog, 1112 King street.

*No. 426, Portsmouth, N. H.—Meets second and fourth Friday in Engineers Hall, 27 Congress st. President, M. L. Schwarz, 18 Wilder st.; recording secretary, T. B. Ruxton, 26 Woodbury ave.; financial secretary, A. B. Damon, Kittery Depot.

*No. 427, Springfield, Ill.—Meets first and third Wednesday, at Electrical Workers' Hall, 210½ S. Fifth street. President, J. D. Valentine, 411 W. Canedy street; recording secretary, A. H. Barth, 615 E. Jackson street; financial secretary, R. W. Berry, 916 E. Edwards street.

*No. 428, Bakersfield, Cal.—Meets every first and third Tuesday of each month at 1803 Chester avenue. President, Wm. H. Murray; recording secretary, C. T. Collins; financial secretary, J. E. Baker, 904 19th street.

*No. 429, Columbus, Ga.—President, G. W. Schultz, Automatic Tel. Company; recording secretary, S. B. Montgomery, Southern Bell Tel. Company; financial secretary, Frank Hudson, Southern Bell Tel. Company.

*No. 430, Racine, Wis.—Meets second and fourth Saturday of the month, at 8 p. m., at Trades Labor Hall, Fourth and Main streets. President, J. P. Brown, 1521 State street; recording secretary, Fred M. Brooker; P. O. Box 247; D. A. Howard, 1917 N. Chatham street.

*No. 431, Frederick, Md.—Meets every first and third Saturday in the month at Farmer Hall at West Patrick street. President, H. H. Barnes; financial secretary, S. F. Gardner, 187 South Market street.

*No. 432, Eau Claire, Wis.—Meets second and fourth Tuesdays at Union Hall, corner Barstow and Wisconsin streets. President, George Headwick, 245 Barlond street; recording secre-

August
1904

tary, Chas. Anger, 948 Madison street; financial secretary, Louis Marsh, 521 Congress street.

*No. 433, Fremont, Ohio.—Meets second and fourth Tuesday of each month at Germonade's Hall, corner of Park and Napoleon street. President, Ed. E. McCarty, 337 Harrison street, Fremont, Ohio; recording secretary, R. G. Dunfee, 401 Ash street, Fremont, Ohio; financial secretary, Wm. P. Stevens, Fremont, care U. S. Telephone Co.

*No. 434, Douglas, Ariz.—President, J. H. Stewart; financial secretary, F. C. Farrington-care Douglas Imp. Co.

*No. 435, Marion, Ohio.—Meets every Saturday at Central Trades Council Hall, South Main street. President, R. C. Owens, Ola street; recording secretary, Sylvester Rowe, 269 North Oak street; financial secretary, Fred Rowe, 269 North Oak street.

*No. 436, Oneonta, N. Y.—Meets second and fourth Tuesdays at Trade and Labor Council Hall at 180 Main street. President M. J. Young, 265 Main street; recording secretary, B. J. Waltz, 46 Academy street; financial secretary, Jno. O'Brien, 26 Broad street.

*No. 437, Fall River, Mass.—Meets first and third Mondays in each month at I. B. E. W. Hall, 26 North Main street. President, T. D. Sullivan, 253 Fifth street; recording secretary, John E. Sullivan, 576 Plymouth avenue; financial secretary, H. A. Manchester, general delivery.

*No. 438, Greater New York, N. Y. (Electrical car workers).—Meets every Friday, at Odd Fellows Hall, 67 St. Mark's Place, New York. President, John W. Schmidt, 688 Gates avenue, Brooklyn, N. Y.; recording secretary, E. M. Young, 5617 Third avenue, Brooklyn, N. Y.; financial secretary, Julius N. Ehrenberg, 112 East Eighty-third street, New York.

*No. 439, Alliance, Ohio.—Meets first and fourth Friday at Fogg Building, corner Mechanic avenue and Main street. President John McCoskey, P. O. Box 946; recording secretary, A. V. Stanley, 213 W. Main street; financial secretary, H. J. Erhardt, 213 W. Main street.

*No. 440, Grand Rapids, Wis.—Meets second and fourth Saturdays at Catholic Foresters Hall, East Side. President, Geo. M. Huntington; recording secretary, C. M. Dougharty; financial secretary, J. H. Noyes.

*No. 441, Janesville, Wis.—Meets second and fourth Thursdays at Assembly Hall, corner Milwaukee and Franklin streets. President, James Fraser, recording secretary, Ed. Barron, 207 Cherry street; financial secretary, Joseph C. Shuler, 56 Palm street.

*No. 442, Spartansburg, S. C.—Financial secretary, Fred Schueler, care of So. Bell Tel. Co.

*No. 443, Key West, Fla.—Meets second and fourth Wednesday at Cigarmakers Hall, corner Caroline and Elizabeth. President, H. L. Lee, 514 Southard st.; recording secretary, Jos. H. Monticino, 500 White st.; financial secretary, R. B. Gilbert, 514 Southard st.

*No. 444, Richmond, Ind.—Meets second and fourth Thursdays in Union Hall, over 511 Main st. President, D. L. Woods, 10 South Seventeenth st.; financial secretary, J. L. McNeill, 105 North Ninth street.

*No. 445, Battle Creek, Mich.—Meets every Friday at Trades Council Hall, Main and Jefferson streets. President, Wm. Evans; recording secretary, W. R. Blodgett, 588 Marshall avenue; financial secretary, I. P. Long, 21 Locust street.

*No. 446, Columbus, Ohio.—Meets every Friday at 8 p. m. at 167½ South High street, over Lazarus' department stores. South High street. President, J. C. McCoy, 720 Cleveland ave; recording secretary, Henry Kern, 570 Stanley st.; financial secretary, J. H. Esmond, 408 Buttles ave.

*No. 447, Port Huron, Mich.—Meets second and fourth Mondays in C. M. B. A. Hall, 935 Military street. President, Wm. J. McManus, 1504 Ninth street; recording secretary, H. S. Adams, Hotel Messenger; financial secretary, P. Leo Wittliff, 825 Griswold street.

*No. 448, Annapolis, Md.—Meets second and fourth Thursdays at Arundel Hall, cor. West and Church Circle. President, J. Boyd Dexter, 169 Green street; recording secretary, W. G. Foth-

ergill, Eastport, Anne Arundel county, Md; financial secretary. E. T. Beavins, 13 Cathedral street.

*No. 449, Augusta, Ga.—Financial Secretary, J. L. Reed, care of Strowger Exchange.

*No. 450, Trinidad, Colo.—Meets first and third Thursday, Poltry Block, Commercial street. President, E. T. Drout, Tel. Co.; recording secretary, Joe. Gayway, First street; financial secretary, John Nigro, general delivery.

*No. 451, New Decatur, Ala.—President, J. H. Mackin, Ala. Traction Co.; recording secretary, Jas. Foster, Box 86; financial secretary, George H. Rider, So. Bell Telephone Co.

*No. 452, Pensacola, Fla.—Meets every Wednesday at 7.30 p. m. at Central Trades Council Hall, Old Armory Hall. President, Gus. Boursette, 626 East Garden street; recording secretary, T. D. Adams, P. O. Box 788; financial secretary, W. C. Walker, 513 North Sixth avenue.

*No. 453, Sumter, S. C.—President, R. A. Wilson, 108 Harrin st.; Recording and financial secretary, E. H. Lynam, 311 West Calhoun street.

*No. 454, Charlotte, N. C.—President, J. R. Griffith; recording secretary, W. W. Norwood; financial secretary, S. J. Alexander, 508 Poplar street.

*No. 455, Shawnee, O. T.—Meets every Thursday at Labor Hall. President, W. C. Campbell, 304 North Tucker street; recording secretary, B. Shipley, 215 E. Main street; financial secretary, H. Brown, P. O. Box 421.

*No. 456, Oklahoma City, O. T.—President, C. B. Griffin; recording secretary, F. Maurice Johnson, 317 West Pott street; financial secretary, Guy Wetherbee, 1105 North Harvey.

*No. 457, Kenosha, Wis.—Meets first and third Fridays, at Schilt's Hall. President, F. O. Wood, 5 Park Court; recording secretary, Ellis Hogan; financial secretary, E. Parsons, 14 Park Court.

*No. 458, Aberdeen, Wash.—Meets every Sunday, 12 m., at Longshoremen's Hall. President, Frank Ratty; recording and financial secretary, M. O. James, 201 Heron street.

*No. 459, Cortland, N. Y.—Meets second and fourth Tuesday at Martin Block, Main street. President, John J. McMahon, Groton avenue; recording and financial secretary, W. H. Hartnett, 5 Sand street.

*No. 460, Chickasha, Ind. T.—Meets second and fourth Friday nights of each month at Riddle and Kings law office, Bank of Commerce Building. President, C. P. Bowen; recording and financial secretary, Charles A. King, Box 491.

*No. 461, Lowell, Mass.—Meets every Tuesday at Bay State Hall, Central st. President, James E. Farrell, 107 Fulton street; recording secretary, J. M. McDermott, 100 Bourne street; financial secretary, George B. Conant, 178 Cross street.

*No. 462, St. Louis, Mo.—Meets every Wednesday night at Lightstones Hall, southeast corner Eleventh street and Franklin avenue. President, John M. Kossenjans, 2015 Geyer avenue; recording secretary, Norman O. Wagner, 2120 Locust street; financial secretary, Wm. Folkerts, 1121 Union avenue.

*No. 463, Montreal, Province of Quebec, Canada.—Financial secretary, T. Soucy, 468 Wolfe st.

*No. 464, Cleveland, Ohio.—President, W. A. Campbell, 86 Berlin st.; recording secretary, Barney S. Kirchner, 553 Lorain st.; financial secretary, Wm. B. Smith, 34 Barbara st.

*No. 465, San Diego, Cal.—Meets Wednesdays in Snyder Block, 835 Sixth street. President, A. J. Otis, 1522 Columbia street; recording secretary, R. Heilbron, 849 Twenty-second st.; financial secretary, Harry Eckenrode, 606 Julian ave.

*No. 466, Belvidere, Ill.—President, Jas. Thorne, 411 McKinley st.; financial secretary, Geo. Trinoney.

*No. 467, Chattanooga, Tenn.—Meets Monday at G. A. R. Hall, over 115 W. Eighth st. President, W. B. Lawing, 18 Bluff View; recording secretary, J. H. Brobeck, 1019 E Eighth street; financial secretary, J. W. Daubenspeck, Sherman Heights.

*No. 468, Dover, N. H.—Meets first and third Thursdays at Weavers Hall. President, James W. Flynn, 2 Huff street; recording secretary, C. H. Warren, 29 Chestnut street; financial secretary, John Cameron, 595 Central avenue.

DISTRICT COUNCILS.

First District Council, Schenectady, N. Y.—Meets first and third Tuesday of each month, in Mohawk Hall, Brodt & Yates Building, corner State and Center streets. President, John H. Cornick, 806 Grant avenue; vice-president, Barney A. Cawley, 77 Second avenue; recording secretary, Chas. F. Ford, 98 Church Road.

Sixth District Council.—President, J. P. Connor, G. V. P., Union Depot Hotel, Dallas, Tex.; vice-president, J. P. Broderick, 722 South Pine street, St. Antonio, Tex.; secretary-treasurer, Lee Stephens, 601 West First street, Fort Worth, Tex.

BUSINESS AGENTS.

No. 1, St. Louis, Mo.—James Dooley and Harry Porter, 1028 Franklin avenue.

No. 2, St. Louis, Mo.—H. Myers, 2905 A Easton avenue.

No. 3, New York.—G. W. Whitford, James Stanton. D. H. Armstrong, Ed. Arrington.

No. 5, Pittsburg, Pa.—F. Friedman, 802 Grant street.

No. 6, San Francisco, Cal.—J. De Vecmon, 35 Eddy street.

No. 9, Chicago, Ill.—M. H. Collins, office, Sam Jacks' Building, 83 Madison street.

No. 14, Pittsburg, Pa.—S. D. Young, 302 Grant street.

No. 17, Detroit, Mich.—E. G. Smith, 82 Farmer street.

No. 18, Kansas City, Mo.—Neal Callahan, 1318 Forrest avenue.

No. 20, New York, N. Y.—P. J. McLaughlin, 149 North Portland avenue, Brooklyn, N. Y.

No. 21, Philadelphia, Pa.—Charles Kirk, 1320 Vine street.

No. 23, St. Paul, Minn.—C. W. Hurd, 1895 Waltham avenue.

No. 25, Terre Haute, Ind.—A. R. Markle, 1027 Seventh avenue.

No. 26, Washington, D. C.—Edw. Nothnagle, corner Sixth and G streets, northwest.

No. 28, Baltimore, Md.—George Reese, 343 N. Calvert street.

No. 33, Cleveland, Ohio.—A. W. McIntyre, 83 Prospect street.

No. 39, Cleveland, Ohio.—Frank J. Sullivan, 83 Prospect street.

No. 41, Buffalo, N. Y.—A. Cunningham, Council Hall.

No. 42, Utica, N. Y.—Robert Kintzings, 80 Lincoln avenue.

No. 43, Syracuse, N. Y.—B. McGuire, 1318 Grape street.

No. 45, Buffalo, N. Y.—James Shane, 78 South Division street.

No. 52, Newark, N. J.—Wm. Bamford, 236 Washington street.

No. 61, Los Angeles, Cal.—C. P. Lofthouse, 124 East Third street.

No. 63, Denver, Colo.—C. A. Nickerson, 218 Charles Block.

No. 79, Syracuse, N. Y.—Lowell Merenens, 405 N. Clinton street.

No. 86, Rochester, N. Y.—J. Monaghan, room 3, Durand Building, 58 Main street.

No. 96, Joplin, Mo.—W. A. Nielson, 715 Jackson.

No. 98, Philadelphia, Pa.—Jas. S. Meade, 1321 Arch street.

No. 102, Paterson, N. J.—R. Clark, 37 Benson street.

No. 108, Boston, Mass.—P. W. Collins, office, 967 Washington street.

No. 112, Louisville, Ky.—Edw. Boyle, McDowell Building, Fourth and Green streets.

No. 114, Toronto, Canada.—W. J. Middleton, 18 Shaftsbury avenue.

No. 116, Los Angeles, Cal.—M. S. Culver, 124 East Third street.

No. 134, Chicago, Ill.—C. M. Bloomfield, 196 Washington street. John F. Cleary, 196 Washington street.

No. 139, Elmira, N. Y.—John Marus, 609 E. Church street.

No. 151, San Francisco, Cal.—J. S. McDonald, 921 Market street.

No. 154, Rock Island, Ill.—Charles Norton, P. O. Box 225.

No. 162, Omaha, Nebr.—F. Wittus, Labor Temple.

No. 194, Shreveport, La.—R. L. Curtis, 323 Walnut street.

No. 184, Galesburg, Ill.—J. H. Shull, 266 Duffield avenue.

No. 186, Hartford, Conn.—Wm. J. Goltra, 285 Asylum street, Union Hall.

No. 210, Atlantic City.—Marshall Burkins, 117 N. Pennsylvania avenue.

No. 212, Cincinnati, Ohio.—C. L. Fleming, 418 Hopkins street.

No. 218, Seattle, Washington.—E. A. Clark, 182 Warren avenue.

No. 279, Chicago, Ill.—Wm. Bonnist, 83 East Madison street.

No. 288, Waterloo, Iowa.—I. J. Wright, care of Gas and Electric Company.

No. 324, Brazil, Ind.—C. J. Vuncannon, Hoffman House.

No. 350, Hannibal, Mo.—A. H. Gwan, 320 Bird street.

No. 356, Kansas City, Mo.—C. F. Drollinger, 1333 Grand avenue.

No. 358, Perth, Amboy, N. J.—Wm McDonough, 133 Smith street.

No. 381, Chicago, Ill.—Edward N. Nockels, 10 E. Randolph street.

No. 390, Johnstown, Pa.—M. R. Brennan, 244 Levergood street.

No. 394, Auburn, N. Y.—D. Ehle, 84 Genesee st

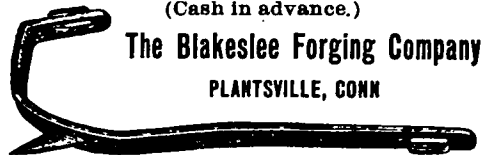
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Jacksonville...100 Key West...443 Miami...349 Pensacola...452 Tampa...108 West Palm Beach...327 Georgia. Atlanta...84 Atlanta...78 Augusta...449 Columbus...429 Rome...312 Savannah...88 Hawaii. Honolulu...111 Idaho. Boise City...291	Indiana. Anderson...147 Brazil...324 Elkhart...157 Evansville...16 Fort Wayne...188 Fort Wayne...280 Fort Wayne...305 Hammond...280 Indianapolis...10 Kokomo...322 Lafayette...222 Logansport...209 Marion...163 Mt. Vernon...418 Muncie...294 New Albany...286 Peru...347 Princeton...289 Richmond...444 Shelbyville...329 South Bend...132 Sullivan...219 Terre Haute...25 Terre Haute...279 Vincennes...243 Indian Territory. Ardmore...406 Chickasha...460 Muskogee...384 Illinois. Alton...123 Aurora...149 Belleville...50 Bloomington...197 Belvidere...466 Champaign...203 Chicago...9 Chicago...49 Chicago...184 Chicago...282 Chicago...876 Chicago...881 Danville...290 Decatur...242 East St. Louis...309 Elgin...117 Freeport...387 Galesburg...184 Jacksonville...419 Joliet...176 Kankakee...362 Kewanee...94 La Salle...321 Lincoln...308 Mattoon...383 Ottawa...341 Peoria...34 Peoria...302 Pullman...282 Quincy...87 Rockford...196 Rock Island...154 Rock Island...278 Springfield...193 Springfield...427 Sterling...339 Streator...236 Iowa. Boone...372 Burlington...401 Cedar Rapids...228 Cedar Rapids...253 Clinton...273 Davenport...109 Des Moines...55 Dubuque...198 Mason City...170 Muscatine...208 Oskaloosa...336 Ottumwa...173 Sioux City...47 Waterloo...288	Kansas. Atchison...19 Emporia...333 Fort Scott...162 Lawrence...361 Pittsburg...107 Parsons...337 Topeka...225 Wichita...144 Kentucky. Henderson...82 Hopkinsville...317 Lexington...183 Louisville...112 Louisville...369 Owensboro...216 Paducah...177 Louisiana. Baton Rouge...315 New Iberia...338 New Orleans...4 New Orleans...180 New Orleans...281 Shreveport...194 Maine. Portland...399 Maryland. Annapolis...448 Baltimore...27 Baltimore...28 Baltimore...46 Cumberland...307 Frederick...431 Massachusetts. Boston...103 Boston...104 Boston...396 Brockton...223 Fitchburg...410 Lawrence...385 Lowell...461 Lynn...285 Lynn...377 North Adams...293 New Bedford...224 Pittsfield...167 Pittsfield...264 Salem...259 Springfield...7 Worcester...96 Michigan. Ann Arbor...171 Battle Creek...445 Bay City...150 Benton Harbor...175 Detroit...17 Detroit...183 Detroit...393 Escanaba...374 Fall River...487 Grand Rapids...75 Grand Rapids...231 Houghton...405 Iron Mount'n...359 Jackson...205 Kalamazoo...395 Lansing...352 Marquette...407 Muskegon...275 Port Huron...447 Saginaw...145 Sault Ste Marie...332 Traverse City...131 Minnesota. Duluth...31 Mankato...412 Minneapolis...24 Minneapolis...292 St. Cloud...393 St. Paul...23 Winona...74 Mississippi. Jackson...257	Missouri. Meridian...391 Natchez...285 Fulton...365 Hannibal...350 Jefferson City...375 Joplin...95 Kansas City...18 Kansas City...380 Kansas City...358 Moberly...420 St. Joseph...40 St. Joseph...416 St. Louis...1 St. Louis...2 St. Louis...59 St. Louis...199 St. Louis...367 St. Louis...462 Sedalia...266 Springfield...385 Montana. Anaconda...200 Butte...65 Great Falls...122 Helena...185 Missoula...408 Mexico. Monclova Coahuila...51 La Cananea Sonora...182 Nebraska. Lincoln...265 Omaha...22 Omaha...162 New Hampshire. Manchester...223 Portsmouth...426 New Jersey. Atlantic City...210 Atlantic City...211 Camden...299 Hackensack...422 Jersey City...15 Jersey City...164 Long Branch...331 Newark...52 Newark...87 Newark...190 Newark...239 Paterson...102 Paterson...339 Perth Amboy...358 Trenton...29 New Mexico. Albuquerque...306 New York. Albany...137 Auburn...300 Auburn...394 Binghamton...325 Buffalo...41 Buffalo...45 Cortland...459 Elmira...139 Hornellsville...92 Ithaca...409 Jamestown...106 Kingston...277 Middletown...101 Newburgh...417 New Rochelle...127 New York...3 New York...20 New York...270 New York...368 New York...438 Niagara Falls...58 Olean...214 Oneida...373 Oneonta...436 Oswego...323	Portchester...402 Poughkeepsie...286 Rochester...44 Rochester...86 Rochester...220 Rochester...234 Saratoga Springs...261 Schenectady...140 Schenectady...232 Schenectady...234 Schenectady...247 Schenectady...252 Schenectady...254 Schenectady...267 Syracuse...48 Syracuse...79 Troy...392 Utica...42 Utica...181 Watertown...421 North Carolina. Asheville...239 Charlotte...454 Wilmington...138 Ohio. Akron...89 Alliance...439 Ashtabula...143 Canton...176 Chillicothe...248 Cincinnati...30 Cincinnati...212 Cincinnati...235 Cleveland...38 Cleveland...89 Cleveland...444 Columbus...54 Columbus...446 Dayton...118 Dayton...241 East Liverpool...93 Findlay...298 Fremont...433 Hamilton...206 Lima...82 Lorain...237 Massillon...35 Mt. Vernon...97 Newark...172 Norwalk...414 Piqua...237 Sandusky...110 Springfield...204 Steubenville...246 Toledo...8 Toledo...246 Warren...411 Youngstown...62 Youngstown...64 Zanesville...160 Oklahoma. Guthrie...364 Oklahoma...456 Oklahoma...155 Shawnee...455 Oregon. Portland...125 Pennsylvania. Allentown...366 Altoona...271 Chester...189 Connellsville...328 Easton...91 East Mauch Chunk...244 Erie...56 Greensburg...379 Harrisburg...53 Johnstown...390 Lancaster...71
--	---	---	--	---

CLASSIFIED LIST OF LOCAL UNIONS—Continued.

Meadville.....408	Spartansburg.442	Utah.	Wheeling.....141	Victoria.....280
New Brighton.343	Sumter.....458	Ogden.....316	Wheeling.....141	Manitoba.
New Castle.....82	South Dakota.	Salt Lake City. 57		Winnipeg.....166
Oil City.....223	Sioux Falls.....360	Salt Lake City.195	Wisconsin.	Winnipeg.....435
Philadelphia.. 21	Tennessee.	Salt Lake City.354	Appleton.....201	New Brunswick.
Philadelphia.. 98	Chattanooga .467	Salt Lake City.380	Ashland.....255	St. John.....174
Philadelphia..240	Knoxville.....318		Beloit.....311	
Philadelphia..287	Memphis.....192	Virginia.	Eau Claire.....432	
Pittsburg..... 5	Nashville.....129	Newport News	Grand Rapids.440	
Pittsburg.....14	Texas.	165	Janesville.....441	
Pittsburg.....319	Austin.....115	Norfolk..... 80	Kenosha.....457	
Pittsburg.....355	Beaumont.....221	Richmond..... 48	La Crosse.....185	Ontario.
Pittston.....357	Beaumont.....308		Madison.....159	
Seranton..... 81	Dallas..... 69	Washington.	Marinette.....274	
Shamokin.....263	Dallas.....188	Aberdeen.....458	Milwaukee.....424	Hamilton.....105
Sharon.....218	Denison.....398	Everett.....191	Milwaukee..... 83	London.....120
Uniontown.....161	El Paso..... 18	Seattle..... 77	Oshkosh.....187	Ottawa.....400
Warren..... 63	Fort Worth.....156	Seattle.....202	Racine.....430	St. Catherines.249
Wilkesbarre..163	Galveston.....124	Seattle.....217	West Superior.276	Sault Ste Ma-
PhilippineIsland's	Greenville.....348	Spokane..... 73		rie..... 85
Manila.....413	Houston..... 66	Tacoma..... 76		Toronto.....114
Rhode Island.	Palestine.....388	Whatcom.....384	Wyoming.	Toronto.....858
Providence.... 99	Paris.....320		Cheyenne.....415	
Providence....258	San Antonio.. 60	West Virginia.		Quebec.
Newport.....268	Sherman.....272	Bluefield.....119	CANADA.	Montreal.....423
South Carolina.	Temple.....153	Charleston.....256	British Colum-	Montreal.....463
Charleston.....179	Tyler.....314	Fairmont.....323	bia.	Quebec.....397
Columbia.....382	Waco..... 72	Parkersburg..163	Vancouver....213	

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